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Newport, R.I.

**A 21st Century Navy Vision: Motivating Sailors to Achieve
Optimum Warfighting Readiness**

By

John K. Martins
Lieutenant Commander, United States Navy

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Command and Staff College.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Paper directed by
Professor William G. Glenney, IV
Deputy Director, Chief of Naval Operations Strategic Studies Group

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Abstract

Since manpower is the basic foundation of any organization's productivity, the 21st Century Warrior is a logical focal point for transforming America's Navy into one optimized for future challenges. Hiding in the confusing myriad of trendy concepts such as "Total Quality Leadership" and "Learning Organizations" lurks the fundamental elements that determine an organization's ability to maximize employee productivity to accomplish the intended mission.

This paper contends that motivating sailors will be the key to the 21st Century Navy's success in a demanding fiscal and global environment. Motivated sailors provide the best national security for the dollar. They want to stay with the organization, and they attract quality replacements upon their departure. In short, readiness and retention improve while recruiting difficulties diminish. The future challenge is to develop a cohesive human resource vision and align the organization to provide a flexible mix of enhanced motivators to the 21st Century warriors.

The challenge is intimidating as 86% of individuals who initially decide to work for the Navy leave or have left at the end of their first commitment. The 21st Century Navy can address this issue with a historic piecemeal approach by individually attacking recruiting, attrition, and retention, or leadership can take more a strategic approach by addressing the fundamental problem; the Navy is not the kind of place where enough people want to work. With the problem identified, the remaining task is to take the first step down the long road of progress.

This manuscript begins with a review of motivational theory before launching into an assessment of today's Navy. An examination of future human resource challenges and specific areas of sailor motivation will set the stage for a five step recommendation for change. Ultimately, the 21st Century Navy will need to transition from a mindset of manning the fleet with expendable sailors to the strategic goal of harnessing the intellectual capital of sailors, thereby achieving maximum warfighting readiness. Properly motivated, the 21st Century Navy will be an innovative organization of professional lethal warriors engaged in the Navy's mission and dedicated towards a common vision.

Preface

This effort was intended to identify the best path towards transforming today's Navy into an efficient and effective 21st Century Navy. As the paper was limited in scope by time and tasking, the emerging human resource vision included only the active duty workforce. Although the term "sailor" is often used to describe active duty enlisted Navy personnel, this paper expands that scope to address active duty officers as well.

This advanced research project satisfies requirements of the Naval Command and Staff College curriculum, however it was conceived and developed during a temporary assignment to the Chief of Naval Operations Strategic Studies Group (SSG). As such, that group's tasking and mission greatly shaped the final product. This year, the Chief of Naval Operations tasked the SSG to expand the previously formulated FORCEnet concept and define the future warrior to operate in the network centric environment. The Warrior Concept Generation Team's (CGT) research provided much insight into many issues addressed in this paper. More importantly, the individual Warrior CGT members fostered an atmosphere of innovation and a plethora of great ideas that were essential to this paper's progress.

During the course of research, the Warrior CGT conducted a variety of meetings, interviews, working groups, and briefs. Although all impacted the author's thinking, the non-attribution nature of the candid information exchange prevented reference to specific speakers or organizations in this work. These valuable contributions are listed in the "Additional Sources" section of this essay.

Finally, the author would like to acknowledge the invaluable feedback from Estella Martins, Professor Bill Glenney, and Randy Oser. Without each of their time, expertise, and guidance, this effort would be a mere collection of random thoughts. As always, eternal gratitude goes out to the author's wife and two children who continue to sacrifice valuable family quality time to support the Navy's mission.

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Chapter 1: Introduction

"Our readiness posture is wholly dependant on attracting and retaining high quality, motivated, and trained sailors."¹ Although the former Chief of Naval Operations, Admiral Jay Johnson, accurately recognized the importance of people in providing national security, the Navy has historically experienced difficulty in converting this rhetoric into action. Consistently challenged to meet recruiting and retention goals, the Navy leadership has allocated money on short term solutions such as increasing numbers of recruiters and a variety of bonuses.

Although navy pay is widely recognized as being lower than that of comparable civilian occupations, it is actually better now than it ever has been. Deployments are undeniably long, but at an average of six months, they are shorter than at any time in Navy history. There is no shortage of qualified enlistment candidates, and as the Marine Corps has demonstrated, the challenge of marketing to Generation X can be met successfully. It is likely that even though the Navy is addressing many of these problems, its piecemeal approach will be inadequate to mitigate current retention and recruiting challenges. Navy leadership, in its search for answers, continues to focus on external matters. Observers suggest that perhaps it is time for the Navy to take a hard look inward, and develop an improved vision for operating in the present circumstances of global transition.

Approximately 55,000 sailors are brought into the Navy each year. At the end of their initial contract, only 7,800 of the original group will reenlist.² In other words 86% of the people who initially decide to work for the Navy, leave or have left by the end of their commitment. Whether the targeted goal is a visionary company, a learning organization, or an innovative organization, the Navy can never achieve true greatness without retaining and harnessing its number one resource, its sailors.

The harsh reality is that there is a problem obtaining and retaining personnel because the Navy is not the kind of place where enough people want to work. In a recent fleet survey, sailors and their

families were asked how they felt about their Navy careers. Among the usual concerns about housing, pay, and deployments, many Navy men and women noted that they feel the service is "rudderless," and that they do not matter to the Navy's leadership; that they are not part of something greater that matters to their country; and that what they do is not important.³

"Manpower is my number one priority. We're living in a time of incredible economic prosperity and optimism, and it's common knowledge, and I'm hearing it from the CEOs in business and industry, as well as the other service chiefs that 'We are at war for people.' We are emphasizing that we must make, and we must have a collective commitment to Navy people, our most vital resource. This is key to making the greatest Navy in the world even better."

- Chief of Naval Operations (27 Sept 00) ⁴

Admiral Vern Clark's statement before the House Armed Services Committee emphasizes that the United States Navy is the greatest in the world, in all of history. While the Navy is the best at what it does, it appears that it could be doing it better. In a competing climate of economic prosperity and limited funding, leadership will need to reach beyond band-aid fixes to motivate its people.

It has been said that not enough ships to meet commitments is serious, but not having adequate numbers of men and women to take those ships to sea is crippling.⁵ William Dowling contends in his book that, "The motivated worker is also the most productive worker, the worker who sometimes equals or excels any standards that bosses set or would contemplate setting."⁶

This paper will be built on the premise that motivated sailors won't want to leave the Navy (retention), they will achieve their fullest potential while they are working in the Navy (readiness), and they will attract new recruits who want to join the motivated organization (recruiting). Hence the fundamental task emerges as motivating 21st Century Sailors to not only properly man the fleet, but to harness their intellectual capital to achieve a common Navy vision.

In the quest for optimal warrior motivation, this essay will begin with a necessary but brief review of motivation theory. After conducting an assessment of today's Navy, 21st Century challenges will be considered. A common vision will be suggested that includes increased operational efficiency,

improved warrior motivators, organizational alignment, and updated leadership practices. Ultimately it will be argued that to maximize warfighting readiness using limited resources, the Navy must better motivate sailors to be engaged in the Navy's mission, dedicated to the organization, and inspired to achieve their maximum potential.

Chapter 2: Warrior Motivation

Motivation Theory

Employee motivation in the workplace has been well-documented, with volumes of literature concentrated in the 1960's. Frederick Herzberg, a distinguished professor of management writes, "The psychology of motivation is tremendously complex, and what has been unraveled with any degree of assurance is small indeed."⁷ Although there are countless theories on the subject, most share the same basic foundations. This admittedly abbreviated review of an intricate subject is intended merely to provide a taste of widely accepted motivation theories.

Individuals, including sailors, bring their personal needs to the organization in which they work. These needs are partially materialistic and economic, and partially psychological and social.⁸ Personal needs of employees can have significant repercussions on organizations themselves. The 21st Century Navy will need to understand human needs, as they influence attitudes and behaviors of its sailors.

The usefulness of any model of human nature depends on its ability to explain a wide range of social phenomena; the test of such a model is the degree to which it is consistent with observed human behavior. Five frequently used models of human behavior are: 1) The Resourceful, Evaluative, Maximizing Model (REMM), 2) The Economic (Money-Maximizing) Model, 3) The Sociological (Social Victim) Model, 4) The Psychological (Hierarchy of Needs) Model, or 5) The Political (Perfect Agent) Model.⁹ Among this list, REMM distinguishes itself as most applicable to 21st Century American society.

The Resourceful, Evaluative, Maximizing Model (REMM)¹⁰

The REMM term is new, but the concept is a product of over 200 years of research and debate in economics, the other social sciences, and philosophy. It is essentially based upon four postulates. Postulate I states that every individual cares; he or she is an evaluator. This caring is about almost everything: knowledge, independence, the plight of others, the environment, honor, interpersonal

relationships, status, peer approval, group norms, culture, wealth, rules of conduct, the weather, and even music. The second postulate is that each individual's wants are unlimited. The individual's wants cannot be satiated, be they material goods or intangible goods such as solitude, companionship, respect or love. The third postulate is that each individual strives to enjoy the highest level of value possible, although he is always constrained in satisfying his wants. Wealth, time, and the laws of nature are all important constraints affecting the opportunities available to any individual. The last postulate states that the individual is resourceful and creative. He is able to conceive of changes in his environment, foresee the consequences, and respond by creating new opportunities.

Resourcefulness is an important aspect of the REMM. This model contends that as new constraints such as policy or law are implemented, they will almost always generate behavior. This is because creativity and resourcefulness cause an individual to search for substitutes for a newly constrained behavior. The search is not restricted to existing alternatives, thus people will invent alternatives that did not previously exist.

REMM tends to address detailed behavior of individuals more completely than other prevailing social science models. The individual in relation to the organization is as the atom to mass. From small groups to entire societies, organizations are composed of individuals. REMM is the model of human behavior that captures as simply as possible the most important human traits.

REMM implies that there is no such thing as a need because individuals are always willing to substitute. Individuals are willing to sacrifice a little of almost anything for a sufficiently large quantity of other desired things.

George Bernard Shaw, famous playwright and social thinker, reportedly once claimed that while on an ocean voyage he met a celebrated actress on deck and asked her whether she would be willing to sleep with him for a million dollars. She was agreeable. He followed with a counterproposal: "What about ten dollars?" "What do you think I am?" she responded indignantly. He replied, "We've already established that--now we're just haggling over price."¹¹

The fact that all individuals make trade-offs means that there are no such things as human "needs," only wants, desires, or demands. For something more costly, less will be wanted, desired, or demanded than if it were cheaper. REMM asserts that sophisticated, rational individuals will always adapt to their opportunity set.

Comparing REMM to Other Models¹²

The Economic Model is simply a constrained version of REMM, asserting that the individual is an evaluator desiring only monetary income. This model falls apart when examining Navy personnel, who obviously do not work exclusively for the money.

In the Sociological Model of Human Behavior, individuals are viewed as products of their cultural environment. Although popular, it has a nearly exclusive focus on cultural continuity that fails to account for the enormous diversity of human behavior at any given time. The model also ignores the process of conscious deliberation by individuals and organizations when contemplating different courses of action.

The Psychological Model is a step up the evolutionary ladder from the Sociological Model. Like REMM, humans in this model are resourceful, they care, and they have wants and desires. Individual wants, however, are viewed as absolutes. Therefore, substitutions or trade-offs are not part of individual human behavior. Perhaps Maslow provided the best-known formulation of the Psychological Model.

"Human needs," wrote Maslow in 1943, "arrange themselves in hierarchies of prepotency. That is to say, the appearance of one need usually rests on the prior satisfaction of another more prepotent need."¹³

Maslow's needs, in order of their "prepotency" from high to low, are physiological (food, water), safety, love, and self-actualization. In contrast to REMM, Maslow's hierarchy of needs contends the individual is unwilling to give up any food for any amount of safety until his or her food needs are satisfied.

Moreover, evidence of human behavior contradicts Maslow's hierarchy as astronauts and car racers accept less safety in return for wealth, fame, and just plain thrills. Thus, this theory based on individuals driven

by wants, but can not make substitutions, will never completely capture the complexity of human behavior.

The Political Model of Human Behavior characterizes individuals as evaluators that consider other individuals' preferences rather than their own. This individual seeks to maximize the public good rather than his or her own welfare. The REMM rejects the notion of people as "perfect agents."

Thus, while the other models capture an important aspect of behavior, REMM capitalizes on each model's strengths while minimizing its weaknesses. Regardless of the label placed on human behavior, extensive research suggests that individuals are resourceful, evaluative optimizers. Whether politicians, managers, academics, professionals, philanthropists, factory workers, or sailors, they all respond creatively to opportunities presented to them by the environment. They care not only about money, but many things--respect, honor, power, love, and the well-being of others.

Work Force Motivation

Today's work force is radically different than that of the early 20th century. Nowhere is this difference more striking than in workers' purchasing power and economic status. The modern pipe fitter, shipping clerk, or even sailor might not feel wealthy but at least he does not have to worry about the prospect of starvation-level poverty, being forced to live in disease-ridden slums, or being unable to find a minimal amount of warm clothing needed to protect his family in winter. Advances that social reformers, labor union movements, and the mass production of consumer goods have made toward satisfying basic human needs have been little short of phenomenal. Thus, modern affluence has radically reduced the power of the basic survival needs as motivators.¹⁴

Behavioral experts have recognized for some time now that concentrating on economic and security incentives produces only limited gains in worker productivity. The manager who seeks to motivate employees simply by giving them more in the way of physical and economic benefits is following a method that has long since passed a point of diminishing returns.¹⁵

None of this is to say, of course, that physical and economic well-being are not still necessary ingredients in job satisfaction. Nor would experts claim that employees couldn't be motivated by the hope of merit raises or promotions accompanied by higher salaries; obviously they can. But research indicates that, for the long term, the most to hope for by satisfying the lower-order needs and nothing else is to produce a neutral attitude toward the job.¹⁶

As for motivation stimulated by the prospect of raises or promotions, this is symbolic in most cases of the pursuit of other kinds of self-fulfillment: status, for example, or the ability to buy things that denote status. This type of motivation may have some effect on the behavior of individuals but can have very little on the behavior of groups, because if everyone in a group gets a raise, no one's individual status in the group is enhanced. And even in the case of the employee who is rewarded as an individual, what happens when he reaches that point when further promotion is no longer possible, or when he already has a swimming pool in the backyard and the kids safely through college? Although most employees desire money, the resulting status needs to be available in other ways as well.¹⁷

Frederick Herzberg, a Case Western Reserve University professor and author of The Motivation to Work, identified challenge as a source of motivation. He argued that an individual whose job afforded opportunities for growth and development would be more satisfied than an individual whose job "disconnected" effort and achievement.¹⁸

As the discussion proceeds into individual motivators, it is worth addressing both positive and negative influences on employee motivation. A past study concludes that there are five factors that stand out as strong determiners of job satisfaction; achievement, recognition, work itself, responsibility, and advancement, the last three being of greater importance for lasting change of attitudes.¹⁹ Unlike the satisfiers, "dissatisfiers" consistently produced short-term changes in job attitudes. The major "dissatisfiers" were company policy and administration, supervision, salary, interpersonal relations and working conditions.²⁰ It was determined the opposite of job satisfaction would not be job dissatisfaction, but rather no job satisfaction; similarly, the opposite of job dissatisfaction is no job dissatisfaction, not satisfaction with one's job.²¹

Thus, when we think of humans, we must ask two questions. First, how happy are they? Then a distinctly separate question: How unhappy are they? If a starving artist is questioned about his job satisfaction, he might reply that he loves what he is doing but is much dissatisfied with his hygiene, or quality of life.²²

Motivating the Warrior

REMM embraces three aspects of motivation that add to the complexity of the topic: first is the many different factors that affect individual motivation, next is the diversity of individuals in a given workforce, and finally is the often conflicting nature of motivation factors.

Consider a common definition of motivation: that which energizes, directs, and sustains behavior. Following such a definition, it appears there are many divergent factors can affect the desire of an employee to perform.²³

Next, consider the many different people and many different jobs in a large organization such as the U.S. Navy. The Navy workforce is comprised of a variety of different occupations such as doctors, aviators, airplane mechanics, deck hands, sonar operators, administrative assistants, intelligence specialists, food service specialists, computer specialists, and even special operations warriors. Each of these jobs might attract slightly different individuals responding to different motivators. Similarly, an individual is motivated by factors specific to his or her own upbringing and preferences. For example, a single sailor who never graduated from high school might be motivated differently than a married sailor with four children who has earned his PHD. Similarly, a person brought up in a very affluent household might be motivated differently than someone brought up in poverty.

Finally, there is the issue of conflicting motivators. K. Lewin addresses motivational conflicts in Lewin's theory, where he states, "there is a continuing interaction between forces in the environment which impinge on the individual, and motivational forces within him."²⁴ Consider the sailor who joined the Navy to receive \$20,000 towards college tuition after he leaves the service. The very motivator that caused him to enter the service becomes a motivator to leave in pursuit of a college degree.

In short, there is no one motivator that has equal impact across the Navy workforce, and therefore there can't be one approach to solve all problems. It appears that the ideal human resource vision would include a variety of aligned motivators that can be tailored to individuals according to their needs.

Why Do Warriors Work?

"Work in an occupation is usually regarded as the principal long-term activity of human life, at least in civilized societies. However, it can be argued that in many cases people are forced to work by the necessity of gaining a livelihood, and by social pressures to do this, rather than instigated by persistent goal-directed motivation."²⁵ This observation by M.D. Vernon leads to the fundamental question that the Navy needs to answer to properly motivate its sailors: "Why do warriors work?"

Fundamental Motivations

In the caveman days, basic survival was largely determined by the individual's ability to hunt, gather food, and provide shelter. Today, these concepts have evolved into the ability to make money required to purchase basic necessities. As previously discussed, however, the ability in today's society to provide for basic necessities is relatively easy to achieve. Thus, although salary is very important, it is no longer the sole motivating factor.

One Saturday in mid January 1978, sixty-two employees of a northern British Columbia saw mill worked a voluntary six-hour shift, producing almost fifty-seven thousand board feet of lumber, worth an estimated value of \$2333. The reason was to give the mill's owner a belated Christmas present.²⁶ Many would agree today's sailors sacrifice even more on a daily basis in the service of their country, suggesting that their work motivation is not based entirely on financial compensation. Carl Von Clausewitz, a recognized expert in military theory, never mentions compensation in his observation, "Of all the passions that inspire man in battle, none, we have to admit, is so powerful and so constant as the longing for honor and renown."²⁷

Similarly, much current civilian business literature focuses on the limited value of typical reward type models. Research suggests that, by and large, rewards succeed at securing one thing only: temporary compliance.²⁸ When it comes to producing lasting change in attitudes and behavior, rewards, like punishments, are strikingly ineffective. Once the rewards run out, people revert to their old behaviors. Studies show that offering incentives for losing weight, quitting smoking, or using seat belts is not only less effective than other strategies but often proves worse than doing nothing at all. Incentives, a version of what psychologists call extrinsic motivators, do not alter attitudes that underlie behaviors. They do not create an enduring commitment to any value or action. Rather, incentives merely and temporarily change what we do.

As for productivity, at least two dozen studies over the last three decades have conclusively shown that people who expect to receive a reward for completing a task or for doing that task successfully simply do not perform as well as those who expect no reward at all.²⁹ In general, as more cognitive sophistication and open-ended thinking was required, people performed worse when working for a reward.

Author G. Douglas Jenkins, Jr., tracked down 28 previously published studies that measured the impact of financial incentives on performance. His analysis, Financial Incentives, published in 1986, revealed that 16, or 57% of the studies found money had a positive effect on performance.³⁰ However, all of the performance measures were quantitative in nature: a good job consisted of producing more of something or doing it faster. Only five of the studies looked at the quality of performance, and none of those five showed any benefits from incentives.³¹ These findings suggest that bonuses such as selective reenlistment bonuses (SRBs) might be successful at temporarily manning the fleet, but will not inspire greatness or optimum readiness.

Many managers understand that coercion and fear destroy motivation and create defiance, defensiveness, and rage. They realize that punitive management is a contradiction in terms. A kick in the pants may produce movement but never motivation. These same managers are often not aware that punishment and rewards are two sides of the same coin. Rewards have a punitive effect because they,

like outright punishment, are manipulative. "Do this and you'll get that," is not really very different from, "Do this or here's what will happen to you." Furthermore, whether the incentive is withheld or withdrawn deliberately, or simply not received by someone who had hoped to get it, the negative effect is identical.³²

If the goal is excellence, no artificial incentive can ever match the power of intrinsic motivation. People who do exceptional work may require payment, but they do not work to collect a paycheck. They work because they love what they do. Rewards, like punishment, may actually undermine the intrinsic motivation that results in optimal performance. The more a manager stresses what an employee can earn for good work, the less interested that employee will be in the work itself.³³

Thus, there are many different types of employee motivation that appear to elicit different employee responses depending on the individual. These motivators can be classified in many different ways. For addressing sailors in this discussion, they will be grouped into four basic categories: Compensation (short term survival), future opportunities (long term survival/future security), quality of life, and job satisfaction. It will be argued that these four areas must be satisfied in a complimenting manner to achieve the required level of warrior motivation. While each category is important for addressing specific aspects of sailor motivation, the collective package tailored to individual needs and desires is the key to optimum warrior readiness.

Compensation

This category of motivation not only refers to putting "Food on the table," it also includes financially based benefits such as health care, housing, and commissary privileges that contribute to basic survival. There is another often-overlooked aspect to compensation that has direct ties to the quality of life category. That is, once the basic survival needs are met, the excess salary that allows Navy personnel to buy nicer cars, go on vacations, live in more pleasing neighborhoods, etc. Thus, although recent literature often devalues compensation as a motivator, it undeniably forms the foundation on which to

build an overall employee motivational package. Unfortunately, other than bonuses, the Navy organization has little ability to manipulate military pay and benefits.

When evaluating worker compensation models, more and more civilian companies are recognizing that compensation is not an expense but a tool for achieving their goals.³⁴ Organizations were created because an individual can accomplish work more effectively in a group than alone. It stands to reason, then, that working collaboratively will reap benefits. The problem is that many compensation systems are designed to reward individual behavior rather than team efforts. If team performance is the desired output, reward systems should be designed that encourage collaboration and cooperation rather than individual productivity.

One company that struggled with rewarding individual efforts that benefit everyone is Cummins Engine, the world's largest maker of large diesel engines and power generators. Atlas Crankshaft, a division within Cummins, designed a reward system that could encourage the entire plant to perform better while rewarding individual efforts that could improve productivity overall. The goal was a variable compensation program that could create a connection between employees and overall plant improvement. The resulting plan included all employees, union and non-union. The core measures used in the plan were the following: Safety incident rate, on-time delivery record, productivity measured as number of pieces per person per day, and managed expenses as a percent of the total budget. A final condition was that employee payouts were funded from savings from the program. In the first four years of the program, employees earned almost \$3 million. Best of all, the company reported it actually saved twice that much in increased productivity since implementation of the program.³⁵

Obviously, today's military pay system has no link to team performance. Two possible alternatives might be to change to the current rigid longevity system that treats everyone equally, regardless of performance, or to design the other three areas of motivation to compensate for financial compensation shortfalls.

Future Opportunities

Future opportunities refers to long term survival and security, and might include either the goal of a better job or eventual retirement with a lifetime salary. Some experts assert that humans fundamentally strive to see their circumstances improve. Many workers will endure a lower paying job or poor working conditions for the experience and education required for a future better job, one that provides a more attractive overall motivation package. Others seek the long term security and basic survival provided by a military retirement plan.

Vernon assesses that the attainment of a secure livelihood is one of the most important motivations for work in many people. Many studies of the factors most conducive to job satisfaction have shown that security is given the greatest importance.³⁶ Even if income gained is not high, to obtain a steady job with regular wages and assured tenure is a very widespread aim, especially among lower paid workers.

Quality of Life

In many cases quality of life can be tied to the compensation aspects of the Navy. The more money a sailor makes, the better quality of life he can afford. One important lifestyle contributor that isn't financially controlled is free time. While the issue of sailor free time will be addressed in subsequent sections, it should be noted that improving the current situation of limited leisure time for sailors will likely have a significant impact toward sailor motivation.

Job Satisfaction

The final category is perhaps the most promising for the Navy because it is so powerful, yet generally costs very little to improve. In many cases, simply targeting leadership practices can enhance job satisfaction.

Through an extensive survey, the Gallup Organization isolated the 12 characteristics of a strong workplace as seen through the eyes of the most successful and productive employees.³⁷ Surprisingly, issues such as pay, benefits, senior management or organizational structure were not identified. Instead, characteristics associated with employee satisfaction dominated the list, such as individual expectations, self worth, and personal development. A workplace with nothing but low-performing employees but an excellent benefit plan might fare very well on some types of surveys, but the survey responses would say nothing about how well the company attracts and keeps the best employees.³⁸

The Gallup Organization tested the theory by surveying 2,500 business units. After assessing their productivity, profitability, retention levels and customer ratings, employees were asked the 12 questions associated with a strong workplace. Consistently, the companies that ranked highest in the four measures of success had workers who answered the questions affirmatively and emphatically. There was a clear link between employee satisfaction and unit performance.³⁹

While difficult to quantify, job satisfaction offers the most potential for improvement, as many aspects can be addressed with simple, and often free, leadership initiatives. The 21st Century Navy will likely need to focus on this area of motivation to successfully harness the intellectual capital of its sailors.

Motivation Summary

Motivating sailors will be the key to the 21st Century Navy's success in a demanding fiscal and global environment. Motivated sailors provide the best national security for the dollar, they want to stay with the organization, and they attract quality replacements upon their departure. In short, readiness improves, retention increases, and the recruiting challenge diminishes. The future challenge will be to develop a cohesive human resource vision and align the organization to provide a flexible mix of improved motivators to 21st Century warriors. The ultimate goal is not just a properly manned Navy, but rather an organization where sailors are dedicated towards maximum readiness and a common maritime vision.

Although there are countless ways to categorize employee motivators, grouping motivating factors only facilitates an academic discussion to reach the ultimate conclusion: that there are a countless combinations of motivators that will appeal to each of the 369,563 active duty individuals⁴⁰ that make up the active naval service.

The primary compensation incentive is balanced with the remaining three accompanying areas of motivation; future opportunities, quality of life, and job satisfaction. Consider the young professional who gladly works 16-hour days, six days a week, in a "dot com" sweat shop because she is financially compensated very well with the opportunity for future prosperity. If the pay wasn't as good, the poor family lifestyle, diminished self worth, and limited retirement plan would cause her to look for another job. Conversely, the best working environment in the world would not overcome the modern requirement for money. Within a rigid military pay structure, the challenge will be to maximize non-financial motivators to compete with civilian opportunities.

The Navy's diverse population creates a situation where individuals desire a different mix of motivating factors. For example, a married person with six dependants may think the Navy pay is adequate, but hates deployments and frequent moves. On the other hand, a single sailor may like the excitement of travel but finds the pay doesn't make up for long work hours. As each individual responds differently to various motivations, the best 21st Century personnel management approach likely will be one that offers a flexible mix of incentives that can be tailored to each sailor's needs and desires. Thus to address the entire Navy workforce, a practical course of action might be to improve satisfiers and minimize "dissatisfiers" in each area of motivation.

Chapter 3: Current Navy Motivation

Today's Navy

The United States Navy is the number one provider of maritime power projection in the world, with no likely peer competitor in sight. Retention and attrition statistics recently have begun to improve, and the fiscal year 2000 recruiting goals were successfully met. Adding to the positive Navy forecast is a new Chief of Naval Operations (CNO) who is taking charge with a fresh vision of the future, "A Framework for Action" (Appendix A). That document lists the CNO's priorities as: 1) Manpower, 2) Current Readiness, 3) Future Readiness, 4) Quality of Service, and 5) Alignment. These five areas promise to address current Navy deficiencies and are positive first steps down the road to improvement.

Despite the optimism, it seems the Navy's management of its most valuable resource, the CNO's number one priority, is still fundamentally broken. The service consciously continues to under fund manning, leaving almost 15,000 required billets unfilled, as seen in figure 1. This places an added burden on already overworked sailors who are assigned to units based upon manning requirements that set a sailor's standard shipboard workweek at 81 hours.⁴¹ Despite a \$91,938,000,000 yearly budget,⁴² the service is essentially under funded in almost all areas, leaving most Navy organizations and their sailors to operate in a constant state of debt avoidance.

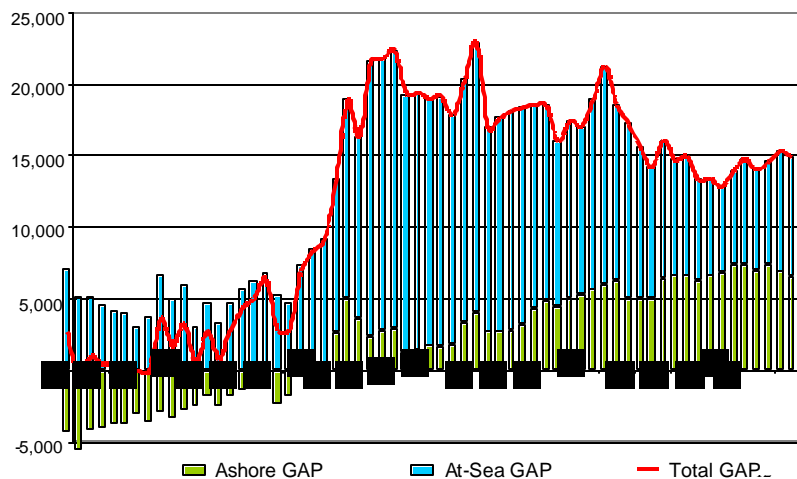


Figure 1
Gapped Enlisted Billets⁴³
(Numbers of unfilled sailor billets over the last five years)

Moreover, deploying sailors are faced with a six-month separation from their families immediately following a morale busting work-up period. Many junior personnel on board vessels such as aircraft carriers are crammed into 101 man berthing areas. Those same junior personnel are often employed in temporary menial jobs they didn't sign up for, such as the cooking in the galley or washing shipmate's laundry. In addition, current world commitments and terrorist threat conditions eliminate attractive port visits in favor of repeated and restricted Persian Gulf port calls.

While these conditions are generally expected to cause relatively high attrition rates and low retention rates among junior first term sailors, an equal effect is being noticed with senior enlisted personnel. Although retention is improving, as figure 2 shows, second and third term retention rates are still very close to the 20 year historic low. Also, these improving trends may be difficult to sustain as they reflect large seasonal influxes of Selective Reenlistment Bonuses experienced this fall.⁴⁴

Although the Navy has met or exceeded its recruiting goals in the last three years, illustrated in figure 3, it appears the Navy might be playing a numbers game by lowering the original goals set in FY99 and FY00. The Chief of Naval Personnel recently observed, "Despite the news of a slowing economy, recruiters in the field continue to struggle with the challenge of finding potential recruits and of making our accession goal."⁴⁵ With a stable force of 369,563 active duty sailors and officers,⁴⁶ the Navy has an unbelievably high turnover rate of replacing one out of every seven sailors each year--arguably one of the worst remaining traditions of the past conscription based force.

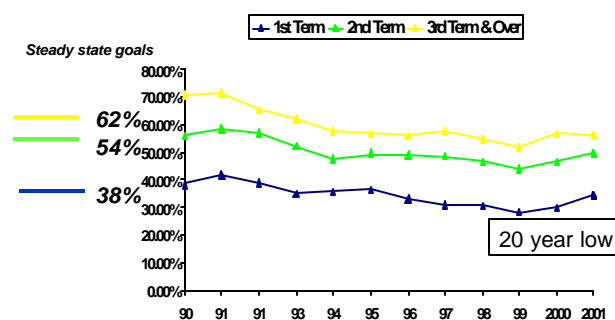


Figure 2
Historic Enlistment Retention Rates⁴⁷
(Percentage of sailors reenlisting for 1st, 2nd, and 3rd terms over time)

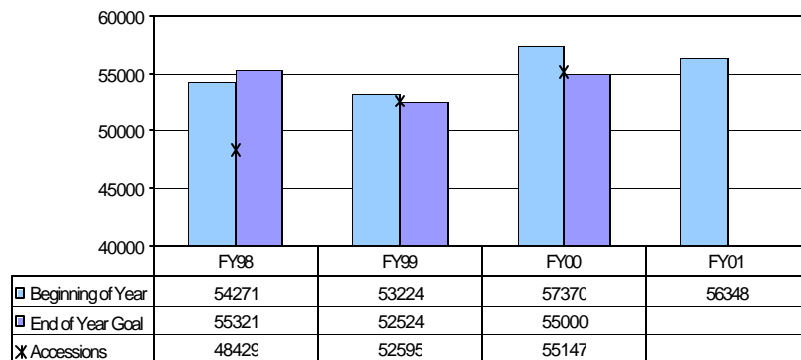


Figure 3
Recruiting Goals⁴⁸

(Original and modified recruiting goals and actual accessions in the last three years)

It seems the post cold war Navy has been drawing down for 10 years and hasn't yet successfully transitioned to keeping its people. The absence of an effective human resource vision is painfully obvious with the difficulty in assembling a comprehensive description of all the benefit programs available to active-duty military members. Several different agencies and offices are responsible for various types of benefit information, and the collective knowledge is scattered across an array of websites and publications. The confusing and often conflicting mix of benefits can itself lend a challenging aspect to recruiting, retention, and overall workplace motivation.⁴⁹ The Chief of Naval Personnel sums up the situation appropriately, "The key challenge is keeping all these personnel and their families informed about all the programs and policies that we have implemented to improve their quality of service. Without question, the job of communications is one of our greatest challenges."⁵⁰

Indeed, the navy human resource baby is ugly and will need to be groomed, clothed, and fed differently to survive the 21st Century "War for People." James Kelly in a recent Proceedings article voices the opinion many in the Navy share, "Something in the system is broken and must be fixed."⁶¹ This paper suggests the overall Navy human resource strategic vision, and the Navy vision as a whole, is deficient. In much of the Navy's defense, however, a reality emerges that it is hard to think strategically when fighting daily people wars in the trenches.

Navy Mission Accomplishment

"The objective of our Navy's forward-deployed strategy is to ensure we possess credible combat capability on scene to promote regional stability and deter aggression throughout the world."

- Chief of Naval Operations⁵²

With over 75% of the earth covered with water, the U.S. Navy offers the ability to lawfully establish a presence in virtually any regions of the world. Thus, the Navy emerges as a tool for the politicians to: 1) safeguard the world's oceans, 2) serve the American people, 3) take care of its sailors, and 4) provide lethal power projection.

The United States Navy fundamentally exists to drive ships, subs, and planes in a maritime environment. The Navy has historically embraced technology well. It is not so renown for the way it manages people or embraces change. George Patton once observed, "Wars may be fought with weapons, but they are won by men. It is the spirit of the men who follow and the man who leads that gains the victory."⁵³ Accordingly, the future Navy will need to maximize its sailor resources to be victorious in future conflicts.

Although already into the 21st Century, the surface fleets of today's Navy, deploying as battle groups and amphibious groups, would look familiar to the admirals of World War II.⁵⁴ This suggest that in over 60 years, the Navy has not changed the fundamental way it provides national security in the changing global environment, and as such, is operating inefficiently in some areas.

Admiral Paul Reason, in his book Sailing New Seas, summarizes the most essential Navy capabilities as sea control, forward presence, and power projection. Freedom of the seas is the most important product of the United States Navy. It is likely the preeminent economic gift of the American people to the rest of the world. Without it, world trade and world economies would collapse. Sea control is therefore the fundamental capability of the Navy.⁵⁵ Providing that service efficiently should be the 21st Century Navy's primary goal.

Just Another Corporation?

The Navy, like a civilian corporation, is an organization of people aligned to perform a common mission. Where the Navy differs from the typical business model is that there is no requirement, or incentive, for Navy leadership to turn a profit or increase the value of the company's stock. As such, the Navy is similar in many respects to the government subsidized AMTRACK--an organization that can never go out of business no matter how inefficient it is.

The Honorable Jerry MacArthur Hultin contends that, "Although the Department of the Navy is not a business, it has enormous business operations built to organize, train, maintain, and equip the world's best naval forces. To meet these obligations, we need processes that support quick, affordable implementation of naval warfare innovation; we need processes that are efficient and effective; we need to avoid the stagnation of a zero-defects mentality."⁵⁶

The current defense department crisis centers around post-Cold War restricted funding that emphasizes the inefficiencies in each service. Just as it is increasingly difficult justifying three redundant tactical aircraft development programs, inefficiencies have also surfaced in the military up or out personnel management model.

Although most military human resource concepts are identical to civilian business models, the critical difference lies in life and death issues surrounding combat. These issues will drive organizational requirements during hostilities, but likely will not affect peacetime human resource management. Sailors are simply members of society organized and motivated to achieve a common Navy vision.

Hiring Warriors

As the Navy is an all-volunteer force, organization and people issues must be compared to competition from the other services as well as the civilian work force. This wouldn't be the case if there was a mandatory draft allowing the Navy to reduce pay and benefits with little regard for the workforce. Today, sailors are free to join or leave the service at will, and thus, the Navy must provide a superior employment package compared to civilian industry to attract top personnel. Former Navy Secretary

Richard Danzig explains that despite the end of the draft more than 25 years ago, "we are still afflicted by a mentality of conscription that treats labor as though it was free."⁵⁷ The Navy must continue to improve sailor standards of living if it wants to remain competitive in the growing economy. Realizing there are no patents on people programs, as the Navy adopts innovative initiatives, the competing services and civilian industry will surely follow. Thus, this improvement process must be on-going and will likely require an organization within the Navy to champion continual progress.

When the United States transitioned to an all-volunteer military, the Navy entered an eternal war for people that recently has been intensified by the country's economic boom. This competition will continue to dominate the 21st Century Navy's challenge to motivate its warriors. As with all competitions, it forces successful players to get good at the game. In this case, Navy leadership is forced to provide the best possible work environment for its people, and the warrior ultimately becomes the true winner.

Leaving the Service

All servicemen eventually leave the military, including the CNO. Reasons for departure include finding a better job, forced departure, or retirement. Table 1 presents a historical comparison between retention rates in post-Vietnam FY-75 and FY-01. It seems second and third term sailors, who are most familiar with the Navy, are choosing to leave in greater numbers. After expending considerable resources to hire and train individuals, retaining them becomes a significant issue. For example, if it costs \$1 million to recruit and train just one aviator, keeping 100 more in the service each year would equate to a savings of \$100 million each year. In addition to the financial gain, the experience retention would significantly contribute to overall warfighting readiness.

Reenlistment	FY75	FY90	FY00	FY01
1 st	39.9	57.8	52.5	56.3
2 nd	59.1	63.7	52.1	52.6
3 rd	95.4	93.4	77.5	75.6

Table 1
Historic Reenlistment Percentages⁵⁸
(Percentage of eligible sailors reenlisting over time)

People Factory

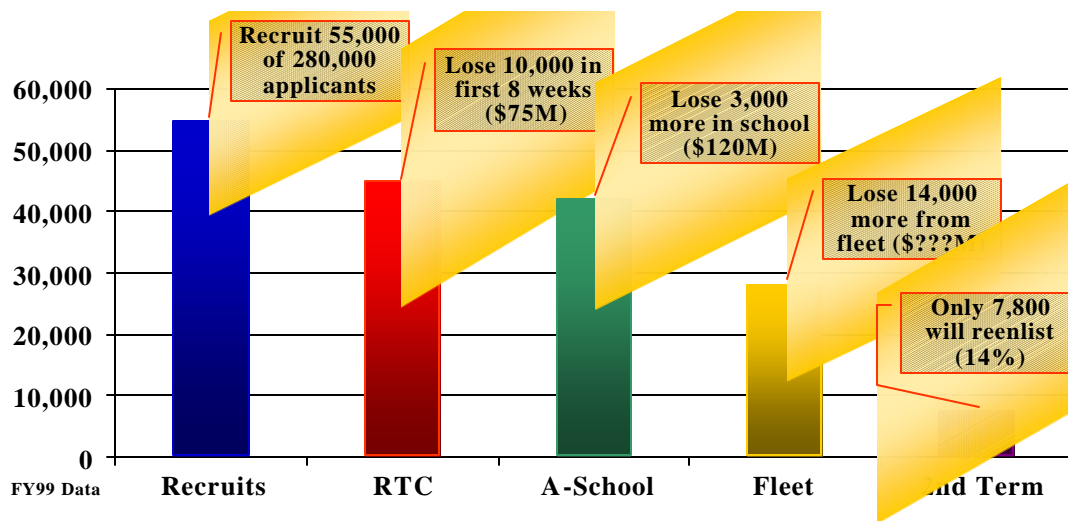


Figure 4
FY-99 Personnel Attrition Trends⁵⁹
(Numbers of people meeting career milestones)

Figure 4, using FY-99 data, emphasizes an alarming statistic--86% of the people who join the Navy, leave or have left the service when their initial commitment is completed. The Navy is clearly an organization where most people do not want to work. With a relatively stable force structure, if 55,000 people are hired each year, the same number must also be leaving. This large percentage of transient personnel--one third of the force is either entering or leaving the service in a given year--makes it impossible to create an innovative organization that capitalizes on the people it claims are its greatest asset.

In a sense, the Navy is a large people factory that stresses numbers of people over qualities or skills. Except for a couple of basic prerequisites, the Navy essentially will hire anyone who wants to come into the organization. Some believe recruiters convince folks that don't even want to join the Navy, to try it out. Figure 5 offers insight on possible attrition consequences of these hiring practices. The time has come to transition to a model more advantageous to the employer, one where the number of applicants far exceeds the number of job openings.

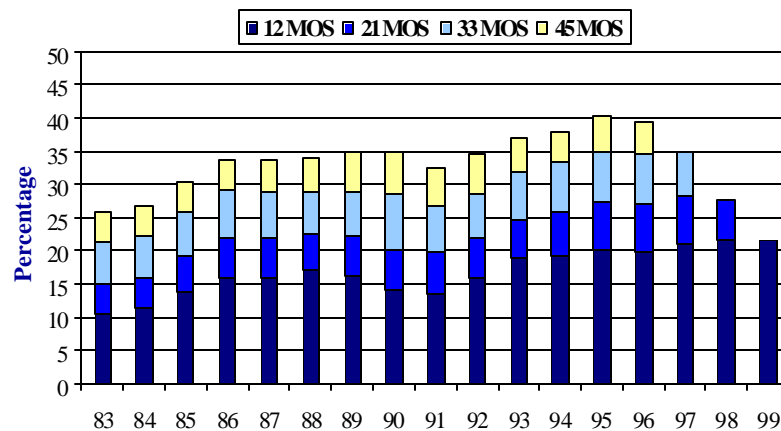


Figure 5
Percentage of First Term Attrition Broken Down by Time in Service⁶⁴

The people factory also places a huge burden on the human resource organization. Each year there are approximately 186,600 promotions, 85,450 separations, 150,000 students, 55,000 new recruits, 5,000 Recruiters, and 110,000 enlisted personnel reassigned (half require training en route). This factory consumes a yearly moving budget of \$848 million, a training budget of \$7.5 billion, and the efforts of 665 detailers.⁶¹ It is difficult to develop a human resource concept for motivating people towards a common Navy vision working in the trenches of the people war.

The Naval Personnel Task Force in October 2000 determined that human resource management in the Department of the Navy is approaching a state of crisis. Current indications suggest that a) interest in military service among prospective recruits is low, b) the willingness of key groups of career personnel to remain in the military is below levels that the services need, c) growing diversity in the workforce

creates challenges to military culture, and d) a thicket of laws and administrative regulations constrains the services' ability to make the best use of their personnel, both military and civilian.⁶²

In their publication, "A Strategic Human Resource Management System For the 21st Century," the Personnel Task Force outlines the importance of a good human resource system:

The individual and collective talents, skills, and capabilities of the total force of active duty, reserve, civilian, and contractor personnel are required to accomplish the mission and goals of the U.S. Navy and Marine Corps. In today's volunteer military forces, leaders rely on a sophisticated human resource management system to recruit, train, assign, motivate, care for, evaluate, retain, and eventually separate personnel. That system affects the quality of life of service members and their families, influences public perceptions of naval service, and contributes to the performance of naval missions today and in the future.⁶³

However, the task force stopped short of concluding the obvious: that the people factory model no longer works for a volunteer 21st Century Navy.

Supplying the Factory

An ideal recruiting process would be designed to allow operational requirements to determine the type, and quality of sailors hired by the Navy. In today's people factory, the budget and numerical magnitude of the recruiting goal arguably dictate the quality of new sailors. The emerging questions are: Is it worth recruiting a guy who doesn't fit into the organization just for numbers, and what are the consequences that it has on the rest of the organization?

A series of steps have been implemented to improve Navy recruiting. As a result, the Navy has reported meeting its FY 99 requirements. However, this came at a large cost, depicted in figure 6. In less than a year, the navy increased the number of field recruiters by 35%, to 5,000 and more than 200 additional recruiting stations have been either recently opened or under construction. The annual budget for recruiting advertising alone rose to \$73.2 million. The Navy also offered enhanced monetary bonuses and educational opportunities to enlistees. Yet, the recruiting challenges are projected to continue for the foreseeable future.⁶⁴

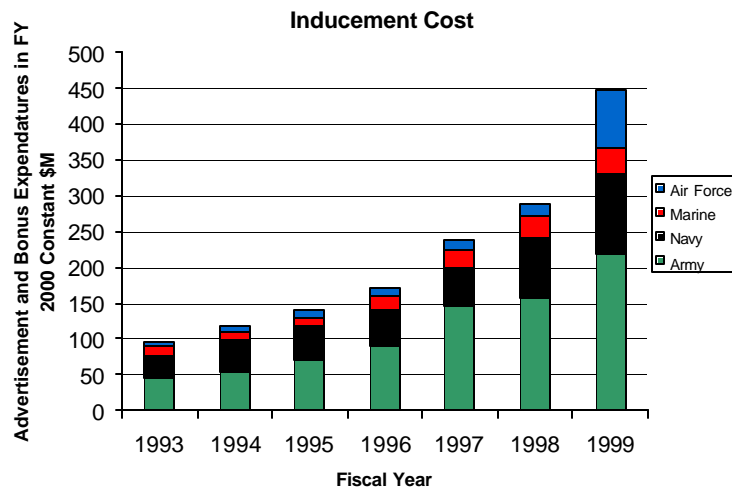


Figure 6
Recruiting Costs (Advertisement and Bonus Expenditures)⁶⁵

Recruiting difficulties culminate in an average of only one new sailor per each recruiter entering the Navy every month. With such a precious asset, the Navy can no longer afford to maintain its high attrition people factory.

Officer Considerations

While this paper loosely uses the term "sailors" to refer to both officers and enlisted personnel, human resource issues for the two groups are generally different. For example, officer recruiting historically has not been a problem, while enlisted recruiting presents a continual challenge.

The current generation of military officers has served under two legislative initiatives that altered career patterns: the Defense Officer Personnel Management Act (DOPMA), and the Goldwater-Nichols requirement for joint service. Basically, DOPMA defines the overall seniority mix of each service and determines how long officers are expected to serve in each pay grade. Although DOPMA's constraints were aligned with service policies, they inevitably limit a service's flexibility and have provoked repeated requests for waivers to permit one or another service to remain out of compliance with DOPMA grade ceilings. Goldwater-Nichols makes joint service a requirement for promotion eligibility and for continued

military service, given the up-or-out nature of military careers. It adds joint tours to the Navy's other requirements for promotion--command assignments, professional military education, tours in the field and in headquarters--thereby forcing an officer to serve in additional capacities during his or her career.⁶⁶

Together, these two provisions tend to have the effect of imposing conflicting demands: within set promotion points, officers are required to fulfill more requirements than can be squeezed into the time available. Among the consequences are that rotational assignments are made for reasons of career enhancement rather than mission performance. Thus, optimum professional development is often sacrificed to ticket-punching.⁶⁷

COMMUNITY	FY99 ACTUAL	FY00 ACTUAL	FY01 TO DATE	STEADY STATE REQUIRED
Surface	24%	27%	29%	38%
SPECWAR	69%	68%	71%	74%
Submarine Nuclear	30%	28%	30%	38%
Surface Nuclear	18%	20%	19%	24%
Pilot	28%	39%	37%	42%
NFO	37%	43%	45%	42%

Table 2
Officer Retention Rates⁶⁸

As for officer body flow, there are approximately 53,000 officers in the Navy with approximately half categorized as restricted line and the other half being front line warfighters. In fact, there are roughly 12,000 doctors and dentists alone. Table 2 suggests that the desired retention goals in most of the officer warfighting categories are not being met.⁶⁹

Bringing officers into the Naval service is generally not a problem because the number of applicants for each of the commissioning sources far exceeds available openings. In FY-01, approximately 785 Naval Academy graduates, 1400 Officer Candidate School graduates, and 1200 ROTC midshipman were commissioned into the Naval service.⁷⁰ The availability of prospective officers allows commissioning sources to increase output to compensate for falling retention rates. The problem resides in the time lag required to "grow" officers to fill the gaps in officer manning. The resulting disparity between inventory and requirements can be seen in figure 7.

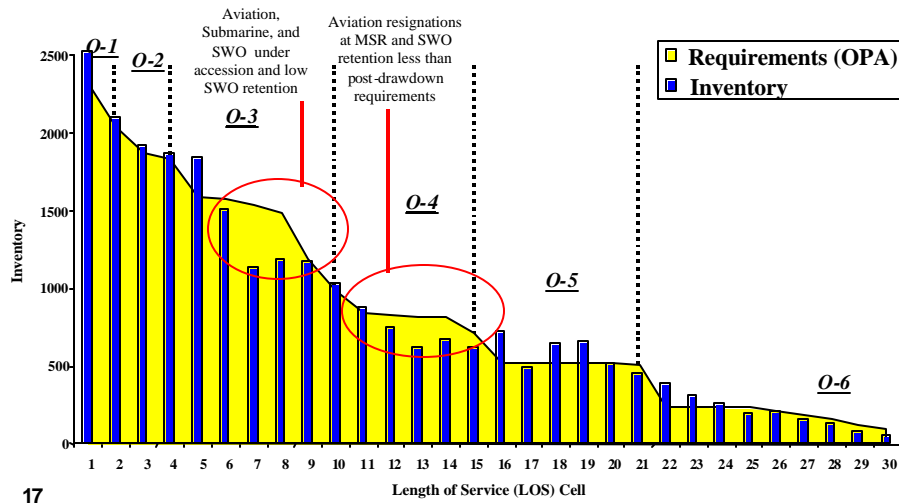


Figure 7
Navy Officer Requirements vs. Inventory⁷¹
(Numbers of officers over years of service)

Fiscally Driven Organization

Many top Navy leaders describe the Navy as bankrupt, with essentially only the submarine service adequately funded. How does an organization whose funding has actually increased over the past years to a bottom line of \$91,938,000,000 for FY 2001⁷² get strapped for cash? The answer is a familiar one to the average American family that realizes the more money it has, the more money it spends.

As with most businesses, the Navy is a fiscally driven organization, but it is not structured or trained to efficiently operate as one. Many would argue that an important difference between corporations and the military is in the bottom line. While a business is driven by profit, the Navy is focused on national security or killing ability. Others counter that these issues are, in fact, one and the same. For example, the more profit or excess funding the Navy has, the more killing ability it can afford with better training, equipment, and people programs. Thus, fiscal efficiency is an important aspect of the 21st Century Navy.

Military budgets are typically allot roughly 30% of the funding to people, 30% to platforms and research and development, and 30% for operating and maintenance expenses. It is not uncommon for

civilian businesses to allot as much as 50% towards personnel funding. The Navy might benefit from a well-informed analysis as to the best readiness maximizing mix for the 21st Century.

Navy leaders are trained very well in the business of waging war. During peaceful periods, however, leaders aren't equipped very well to operate in a fiscally dominant environment. Some would argue that operational warriors should never be concerned with profit or business efficiency. While this premise may be true during times of conflict, it is perhaps the root of the current problems in the 21st Century Navy.

War is an expensive business. It's even more expensive if Naval leaders don't make well-informed decisions on how best to spend the sizable, yet limited budget. Unfortunately, economically uneducated leadership will often make the damaging choice to skimp on personnel funding.

The Navy is currently under-funding the understated requirement for people. Today there are approximately 14,000 gapped billets in the Navy, with approximately 7000 ashore and 7000 afloat. It has been calculated that by cutting 5000 billets in the past, the Navy saved \$100 million a year. For short term savings, the Navy decided to force its people to do gapped billet work in addition to their own excessive work requirement.⁷³

By cutting people to save money, the remaining sailors work harder and as a result, more want to leave. This creates hidden costs for recruiters to find more folks to take their place. At an estimated \$40,000 to recruit and train a sailor and 18,395 people failing to complete their initial obligation, this under funded people requirement likely resulted in a portion of the \$736 million a year cost of attrition.⁷⁴

In addition, another unintended consequence of cutting people is the requirement for added reenlistment bonuses to entice people to stay in the overworked environment. Although it is difficult to quantify, it is likely the originally intended savings actually cost the Navy more in recruiting and selective reenlistment bonus (SRB) funds, not to mention the decreased morale of those dedicated sailors who stay Navy in light of the increased workload.

The current Navy leadership has recognized the importance of funding people programs and has made the financially painful decision to expand the top six enlisted ranks to the congressionally

authorized 71.5% in 2002, with the eventual goal of 75%. In light of the fact that every one percent increase equals approximately \$55 million, this decision was not an easy one in the current fiscally constrained environment.⁷⁵

Decisions yielding immediate financial benefits are relatively easy to make. Most personnel-related decisions, however, often have delayed effects that are difficult to quantify. Navy leaders need formal education tools to make those difficult but prudent business decisions.

Lastly, the military budgetary process imposes relatively shortsighted vision. Ideally, requirements would drive the budget, instead the current reality is that the budget drives requirements. This situation is not likely to change soon, so Navy leadership should be trained to embrace and thrive in this environment.

Leadership Trends

The Thirty-Something Group at the Naval Post Graduate School observed, "Without vision and leadership, organizations have no chance of creating their future, they can only react to it."⁷⁶ This requirement for effective leadership generates concern when warriors across the services lose confidence in the brass. A study released by the Center for Strategic and International Studies (CSIS) found that only 35% of servicemen surveyed agreed with the statement: "When my service's senior leaders say something, you can believe it's true." Moreover, only 44% of junior officers expressed confidence that their own superiors, "Have the will to make the tough, sometimes unpopular decisions that are in the best long-term interest of the service."⁷⁷

A confidential survey done at the Command and General Staff College at Fort Leavenworth, found a 58% increase in attrition among Army captains and reported startling denunciations of leadership. "Top-down loyalty doesn't exist," said a summary of the officers' comments. "Senior leaders will throw subordinates under the bus in a heartbeat to protect others or advance their careers."⁷⁸

CSIS found some units with high morale and inspirational commanders, but confidence has been eroding for some time. Citing the Navy's three most recent personnel studies, CSIS found that in 1996, 63% of Navy officers and 41% of enlisted personnel were satisfied with *overall* Navy leadership. Two years later, respective percentages fell to 51% and 36%. Only 36% of those surveyed by CSIS in all services thought there was an atmosphere of trust between leaders and their subordinates.⁷⁹

Figure 8 displays similar low percentages for *individual* navy commands, with an overall declining trend of three to four percent over a four year period.

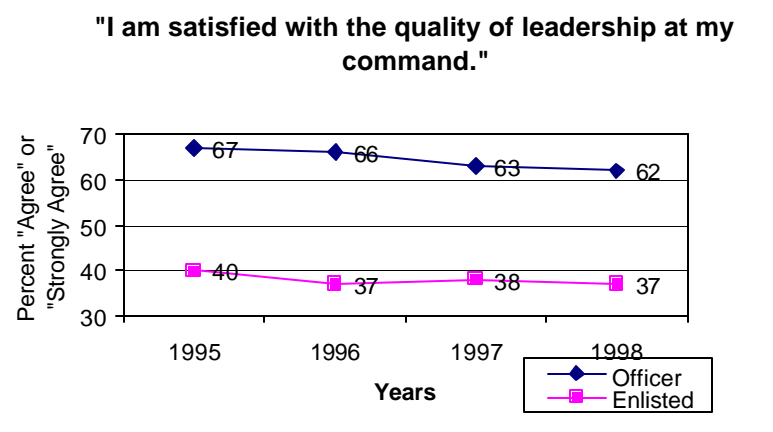


Figure 8
Leadership Quality Survey Results⁸⁰

It's no wonder that articles addressing leadership deficiencies are published in almost all recent issues of Proceedings magazine. The following excerpt was taken from James Kelly's January 2001 Proceedings article, titled "In Search of Real Leaders."

"A consequence of these years of emphasizing career building is officers who are so intimidated by Congress and the news media they would do nearly anything to appease them and protect their own careers. If it is career suicide to stand up for a subordinate who may be unfairly under fire or to tell the unpopular truth about declining readiness, well, better to live and fight another day, they rationalize. Time to 'put it behind us' for the 'good of the service' they say. This may be good management, but it is not leadership. The Navy suffers now because of it."⁸¹

A final criticism is military leadership's apparent inability to change. In an article forecasting reforms across the services, Aviation Week assessed, "The ability of top military officers to ride out unwelcome initiatives by civilian leaders is a fixture of the Cold War Pentagon that has not lost its

strength."⁸² Andrew Marshall, as Director of the Office of Net Assessment, criticized the current crop of military leaders for paying lip service to transforming the military force without being truly committed to it. "The top managers have a lot of things they need to be working on. I don't think they are doing that. They have themselves committed rhetorically, but they aren't serious looking at it."⁸³

In summary, there is a considerable amount of evidence that confidence in military leadership in all the services is less than optimal. Robert E. Lee commented in a letter to Jefferson Davis on 8 August 1863, "No matter what may be the ability of the officer, if he loses the confidence of his troops, disaster must sooner or later ensure."⁸⁴ The Navy may be headed for disaster should this prediction prove accurate.

Time For a Change?

"We all agree we have the best military in the world today. The companies that I have seen get in the worst trouble are the ones that were at one time the best."

-Norman R. Augustine, President and CEO Lockheed Martin Corporation⁸⁵

"The United States struggled for forty-five years to create a defense establishment that could effectively and efficiently prepare for and wage a conflict such as World War II or a possible global clash with the Soviets. Hopefully the Pentagon will not take as long to reorganize for the security challenges of the post-Cold War era, in which organizational adaptability and quickness are major assets."

-Senator Sam Nunn⁸⁶

Andy Marshall also observes, "We are handicapped by the fact that we are so dominant. We don't have a pressing need to change, but we do need to." Today's U.S. military is in relatively the same position as it was in 1924, between the great wars--at peace, pressed for cash, and still just on the cusp of great and important change without the real work having been started. Marshall continues, "In the 1920s and '30s, the major players had about the same technology, when the war came, some militaries had created new operational concepts and new organizations: The guys who got it right just ran over the other guys."⁸⁷

Few organizations have had to endure such a radical transformation as the military's transition from a conscripted to a volunteer force in the early 1970s. That change was truly a cultural upheaval,

overturning central tenets of the military institution. It is often forgotten that what we now deem a stunning management success got off to a very rocky start. By the late 1970s, the armed forces were undermanned, could not attract sufficient recruits to fill the ranks, recruit quality in terms of test scores and educational levels had reached all-time lows, morale had plummeted, and career personnel were leaving in great numbers. The Navy did not have enough petty officers to send all of its ships to sea. The peacetime all-volunteer force, many concluded, was an unsuccessful experiment, and it was time to draw it to a close.⁸⁸

Initially, few alterations were made to the human resource management system to support the all-volunteer force transition. During that first decade, the military suffered severe, but unavoidable trauma owing to a poor implementation to a change in policy.⁸⁹ Future changes need to take a more strategic approach prior to actual execution.

The question arises, is it time for the Navy to change the way it motivates its sailors? In an August 1999 General Accounting Office (GAO) survey of 1,000 service members in critical specialties, about two-thirds of Navy officer and enlisted respondents (65% and 59%, respectively) stated that they were dissatisfied overall with the military. More distressingly, only 37% of Navy officers and 15% of the sailors surveyed planned to stay after their current obligations expire.⁹⁰

When asked to cite their reasons for dissatisfaction, the survey respondents made it clear that the benefits of the military lifestyle were not good enough to counteract the poor working conditions and grueling deployment schedules. GAO found that nature of work circumstances accounted for the majority of the dissatisfiers cited by survey respondents, 62%.⁹¹ The reality is that the Navy demands that its sailors not only achieve and maintain proficiency in the most sophisticated weapons and engineering systems in the world, but also devote significant portions of their workweek to unrewarding tasks such as preservation, space cleaning, and mess cooking.

Indeed, this is the time for a fundamental change in military human resource management. To meet the challenges of the 21st Century, the Navy likely will have to adopt modern employee motivational

techniques characteristic of many "visionary companies." A summary of the visionary company concept is provided as a possible model for the Navy to emulate.

Visionary Companies⁹²

James Collins and Jerry I. Porras define visionary companies in their book, Built to Last, as premier institutions in their industries, widely admired by their peers, and having a long track record of making a significant impact on the world around them. The key point is that a visionary company is an organization--an institution. All individual leaders, no matter how charismatic or visionary, eventually die; and all visionary products and services eventually become obsolete. In fact, entire markets can become obsolete and disappear. Yet visionary companies prosper over long periods of time, through multiple product life cycles and multiple generations of active leaders.⁹³

There are six characteristics that determine a visionary company:⁹⁴ a premier institution in its industry, widely admired by knowledgeable businesspeople, made an indelible imprint on the world, had multiple generations of chief executives, been through multiple product (or service) life cycles, and founded before 1950. Interesting enough, the U.S. Navy appears to satisfy many aspects of Collins' visionary definition.

Collins uses the term visionary, rather than just successful or enduring, to reflect the fact that they have distinguished themselves as a very special and elite breed of institutions. In most cases, they are the best of the best in their industries, and have been that way for decades. Many of them have served as role models for the practice of management around the world. They've woven themselves into the very fabric of society. Some examples of visionary companies are: 3M, American Express, Boeing, Citicorp, Ford, General Electric, Hewlett-Packard, IBM, Johnson & Johnson, Marriott, Merck, Motorola, Nordstrom, Philip Morris, Procter and Gamble, Sony, Wal-Mart, and Walt Disney.⁹⁵

These companies do not have perfect, unblemished records, but they display a remarkable ability to bounce back from adversity. Walt Disney faced a serious cash flow crisis in 1939 that forced it to go

public; later, in the early 1980s, the company nearly ceased to exist as an independent entity as corporate raiders eyed its depressed stock price. Boeing had serious difficulties in the mid-1930s, the late 1940s, and again in the early 1970s when it laid off over sixty thousand employees. 3M began life as a failed mine and almost went out of business in the early 1900s. Hewlett-Packard faced severe cutbacks in 1945; in 1990, it watched its stock drop to a price below book value. Ford posted one of the largest annual losses (\$3.3 billion in three years) in the early 1980s before it began an impressive turnaround and long-needed revitalization.⁹⁶

Although visionary companies do not require great and charismatic visionary leaders, they do almost religiously preserve their core ideology- changing it seldom, if ever. Core values in a visionary company form a rock-solid foundation and do not drift with the trends and fashions of the day; in some cases, the core values have remained intact for well over one hundred years.⁹⁷

Visionary companies display a powerful drive for progress that enables them to change and adapt without compromising their cherished core ideals. These organizations are not the right place to work for everyone. They make some of their best moves by experimentation, trial and error, opportunism, and quite literally accident. Homegrown management is preferred at the visionary companies to a far greater degree than at comparison companies (by a factor of six).⁹⁸

Many would argue that the Navy lacks some attributes required to make it a true visionary company. This poses the question, what can be done with old, large, non-visionary companies? The fact is that the older and larger the organization, the more entrenched the misalignments. It is important to note, however, that it's not too late to change. Philip Morris did not display many characteristics of a visionary company until about the late 1940s, at about its 100th birthday.⁹⁹

Being a visionary company is a continuum. Any company at any time can move along that continuum and become more visionary. There is no quick fix, or next fashion statement in a long string of management fads, or the next buzzword of the day, or a new program to introduce. The only way to make any company visionary is through a long-term commitment to an eternal process of building the

organization to preserve the core and stimulate progress. It might be noted, however, that companies can also lose their visionary status as in the case of IBM.

If the Navy wants to stay the best of the best in the warfighting business, it will need to harness of the intellectual capability of its sailors in a visionary manner. While there is no one correct way that works for all organizations, this paper will use examples from visionary companies as possible suggestions for future improvements.

Chapter 4: 21st Century Environment

"We are dealing with two big 'C' changes: 1) Global Competitiveness; and 2) The end of the Cold War, moving us toward being one world. And that's been a revolution."¹⁰⁰

- Lee Iacocca, Chairman of the Executive Committee of Chrysler Corporation.

Change certainly isn't new, nor is the Navy's need to master it. What are new are its prevalence and its pace. A common forecast contends that globalization will remain a dominant general trend. The world's population will grow substantially, and the developing world will account for most of this growth. The growth will be primarily littoral and urban. The primary mode of energy generation will remain fossil fuels; therefore, the location of primary energy sources will not change dramatically. Economic globalization will continue and will be extensive. One underlying factor will be growth of large transnational firms that will come to dominate most areas of business. Much transport of physical goods between continents will be by sea. Major advances in science and technology will continue to take place. Computing will continue to get much faster and smaller.¹⁰¹

Until now, the information revolution has centered on data; collecting, storing, presenting and transmitting it. In other words, the focus has been on the technology of data gathering rather than on the use of that information. That focus is now shifting from the "T" in "IT" to the "I." The information revolution has made possible the gathering of massive amounts of data, but much of it has gone unused. The information needed to make decisions is there, but the information hasn't been filtered for the decision-maker's use. Thus, what's needed isn't more raw data, more computing speed, or more technology. What's needed is an efficient way to harness the abundance of information.¹⁰²

Some argue that the technological aspect of the future does not greatly affect fundamental human resource concepts. Social changes, however, have a big impact on the way employers motivate their workers. Rebecca Rimel, Executive Director of the Pew Charitable Trusts, asserts that "21st Century leaders have to start making an investment in their employees rather than seeing them as expendable commodities. If leaders will invest in their people, the people will in turn invest in the organization, in

the community, nation, and the world."¹⁰³ This observation is especially relevant for the 21st Century Navy.

Navy Vision

"He whose ranks are united in purpose will be victorious."
- Sun Tzu (over 2500 years ago)¹⁰⁴

Obviously, the concept of a common vision is far from new. Virtually all successful leaders emphasize vision as crucial to creating alignment and setting the direction for their organization. Vision is key for any successful organization because it provides a "magnetic north," a true direction for people to follow.¹⁰⁵

The Navy's vision, found in Appendix A, is, "We must provide, as a part of joint and combined operations, credible, combat-ready naval forces that sail anywhere, any time as powerful representatives of American sovereignty." Although satisfactory in containing prerequisite buzz-words like joint and combat-ready, some might question the vision's utility to set a clear course for the diverse organization of 369,563 active duty personnel to follow on a daily basis.

"Organizations are changing by necessity. Globalization is simply a fact of life,"¹⁰⁶ states Jack Welch, Chairman and CEO of General Electric. With or without a clear vision, the good news is globalization is forcing us to learn, to innovate, and to operate more effectively and with far greater quality and excellence. To achieve world-class performance standards, the Navy will need to produce a more intelligent work force by improving education, respecting and honoring the diversity of individuals, and empowering them in their quest to maximize their talent, creativity, and whole potential. An effective 21st vision might include some of these concepts, or at least mention how to address the Navy's human capital.

FORCEnet

The Navy's technological vision is centered on a concept called FORCEnet. Although the Navy has always been a netted force, 19th and 20th Century communication technology resulted in a delay of weeks or even months to communicate with U.S. Navy assets around the world. Today, connectivity in most cases is both global and real time. FORCEnet, a matured version of the Netcentric warfare concept, generally refers to the technology that will allow increased information flow between individual sensors and weapon systems to achieve a coordinated military objective. As technology continues to facilitate this coordination, the Navy's overall warfighting capability is projected to improve at an incredible rate.

An individual platform's contribution to the overall force will continue to advance along a historic evolutionary path. Although platform capabilities evolve along a predictable progression, the improved coordination of the total force is projected to yield unprecedented global warfighting capabilities.

Although Navy lethality and global effectiveness will improve at an overwhelmingly fast pace in the next 30 years, the people and skills required to populate the force will continue to advance at a manageable pace. The Navy personnel system will need to maintain its current flexibility in adjusting training and education to accommodate any new operator requirements that FORCEnet introduces.

Naval Challenges

An eternal military truth is that as the craftsman designs a bigger and better sword, the shield to counter the improved weapon gets thicker and stronger. For example when radar technology advanced, electronic warfare to counter the new sensor also improved. Similarly, advances in ships and submarines led to upgraded mines, new aircraft prompted development of double-digit Surface-to-Air-Missile systems, stealth technology resulted in counter-stealth efforts, and overwhelming conventional warfare capabilities gave birth to asymmetric warfare. In keeping with the time tested sword/shield relationship, any new technological advances that are adopted by the Navy--including FORCEnet--will be countered by the enemy's attempt to equal an unequal fight.

Twenty-first Century naval personnel challenges will be bounded by the fact that people physically don't change that quickly over time. While sailors likely won't change physically, differences in society and world political climates will alter individual motivations. Hence, the Navy's human resource effort requires flexibility and responsiveness to accommodate those changes.

Future Navy Hardware

In the United States, more cutting-edge technology will be developed by industry, not by the military community. This represents a shift from the Cold War era, in which the military initiated a substantial amount of technological development. It seems the speed of civilian innovation and advances has surpassed the relatively slow military budget and acquisition processes.

Thus, a significant portion of naval combatant technology out to 2030 is already in place or has been identified. New technologies share some common features, including decreased demands for youth and vigor, greater use of commercial-off-the-shelf technology, decreased maintenance and watch standing requirements, and increased need for people with new and higher level competencies (e.g., to monitor systems that remotely control a complex organization).¹⁰⁷ An analysis of future platforms might help quantify future personnel requirements.

One specific example of future naval platform trends is the Smart Ship program, first adopted for the USS Yorktown, CG-48. This initiative targets reduced manning by adopting existing technologies and organizational changes. As a result, the ship's weekly workload has been reduced by over 9000 hours or about 30 percent in manpower requirements. In addition, 44 enlisted personnel and 4 officer billets have been eliminated, which equates to a 12% reduction from the initial manning of 410.¹⁰⁸

The LPD-17 is the Amphibious Transport Dock program that will replace several classes of aging amphibious ships (LHA, LPD4, LSD36, and LST 1179). It is the first major ship design program initiated under the revised DoD acquisition regulations. Current designs call for a crew of 382 and the capability to carry 705 embarked troops. While recognizing the need for reduced life-cycle costs, the

program office stressed the importance of full operational readiness and the need to validate reductions before removing manning. Given this, the overall manning reduction goal for the LPD17 is 20%.¹⁰⁹

The DD-21 is the first new ship class planned to be acquired under the Surface Combatant of the 21st Century (SC21) program. Thirty-two ships are planned for the DD-21 class, with the lead ship delivery originally scheduled in 2008. The DD-21 program has an explicit goal of reducing ship manning to 95, including the helicopter detachment. This is a 75% reduction from the 440-person crew of a baseline reference ship. An important feature of the DD-21 is the emphasis on Human Systems Integration (HSI) early in the design process to reduce crew size without affecting capability. Even though the proposed DD-21 manpower reductions are dramatic, surprisingly this program alone won't have a major impact on total Navy Manpower requirements.¹¹⁰

Using an optimistic production schedule out to 2020, the DD-21 will make up 27% of surface combatants, with the remaining 73% being older Aegis destroyers and cruisers. Analysts in N81 forecast that, by 2020, about 40% of all ships' billets will be on cruisers and destroyers, with the remaining 60% on carriers, amphibious ships, and mine warfare ships. If DD-21 accounts for 10 to 15 % of surface combatant manning, it accounts for only 4 to 5% of total surface ship manning.¹¹¹

As for carriers, the tenth and final Nimitz class carrier, the CVN-77, is scheduled for commissioning in 2008. It will be a transition ship, retaining the Nimitz class hull and propulsion system while incorporating new technologies from ongoing R&D programs and some manning reduction initiatives.¹¹²

The follow-on CVX, CVN-78, is scheduled to enter the fleet in 2013. This carrier will have a new propulsion plant, a big jump in information technology, and innovations in material handling. CVN-79, due to IOC in 2018, will be the first completely redesigned carrier including a new hull. The mission statement for CVX explains, "The platform should be automated to a sufficient degree to realize significant manpower reductions in engineering, damage control, combat systems, ship support, and Condition III watch standing requirements." The goal for CVN 78 is a 20 percent reduction in total ownership cost and a 20-30% reduction in manning.¹¹³

In summary, the majority of future Navy hardware and weapon systems for the next 20 years is either in place today or the Navy already has identified the proposed system. Consistent with a historic evolutionary development trend, the Navy in the near future will look very similar to today's Navy.

Future Personnel Requirements

While future Navy platforms are connected to a fairly slow and predictable budget and acquisition process, some would argue the Navy human resource (HR) system already is lagging behind emerging personnel trends.

The Naval Personnel Task Force has concluded that these are challenging times for U.S. Naval forces. A combination of the post-Cold War military draw down and involvement in worldwide crisis management and humanitarian missions has stressed Navy and Marine Corps personnel to a new pace of peacetime deployment. A booming civilian economy and changing job and career expectations result in diminished interest in military service for many young Americans.¹¹⁴

The future will be even more challenging. The Navy and Marine Corps requirement for technically skilled personnel will rise as naval systems become more complex. Private-sector employers will present stiffer competition for the people the services need. The rapid and ever-increasing pace of technological innovation will challenge the Navy and Marine Corps to adapt to a world of unpredictability, complexity, and speed. Shifts in demographics, changes in the security and economic environment, faster cycles of technical innovation, and increased performance requirements will force change on the Navy's HR system.¹¹⁵

The youth population will reverse a long-term decline and begin to grow, as will number of high-school graduates. More high school graduates will go on to post secondary school. In 1967, 50% of high-school graduates stopped their formal education, in 1996, only 33% stopped at high school. The traditional military recruiting model is based on a two-track system: enlisted recruits come primarily from high school graduates and officer recruits are typically college graduates. This model is becoming

increasingly antiquated. Larger numbers of high school graduates are now going to a 2-year community college program rather than going directly into the workforce. This trend toward additional post-secondary education poses significant problems from the military personnel perspective because none of the services recruit more than 1 percent of their recruits from community college graduates.¹¹⁶

One of the important changes in the civilian labor market in recent years is the shift in the proportion of workers in different occupational categories. For example, since the early 1980s, the proportion of the civilian labor market classified as professional and managerial workers has increased from 22 to 27 percent. Because most officer occupational specialties can be classified as either managerial or professional, there might be a corresponding increase in the percentage of officers.¹¹⁷

Concerning workplace diversity, Kenneth Chenault, President of American Express Consumer Card Group, USA believes, "The 21st Century leader must succeed in a world ruled by cultural diversity and collaboration."¹¹⁸ The reality of women and diverse ethnic people in the workplace is fruit of the seeds that were planted at the birth of our nation by the leaders who created our Constitution. In order for the Navy to provide role models to its sailors, Navy leadership requires ethnic diversity. The Navy must continue to assist and empower diverse people to become better educated, mentored, and welcomed into key leadership roles and all warfighting specialties. Former Congresswoman Claudia Schneider correctly asserts, "Our generation must now establish role models for our children, who will then live in a society which appreciates both genders and the broad spectrum of people."¹¹⁹

The clash between future technologies and personnel issues will likely surface with the new DD-21. DD-21 almost certainly will be mixed gender, and this may force a closer examination of policies concerning pregnancy and sea duty. Today, when a sailor becomes pregnant, she can continue to work on board until the 20th week, but no replacement requisition is generated until the sailor actually detaches. Allowing requisition generation as soon as a sailor becomes pregnant would allow more lead-time for training a replacement.¹²⁰ Restrictions on distance from emergency medical care could create sudden gaps in cases of short-notice underway tasking. These gaps would be crippling in the reduced manning environment of DD-21.

Elaine Donnelly argues that it does not help to stifle comments about the consequences of social change. The Navy's pregnancy policy, for example, prohibits negative comments about unplanned losses among female crewmembers, who often aren't replaced during a deployment. This is a problematic element of the Navy's overly generous pregnancy policy, which accommodates, subsidizes, and therefore encourages single parenthood.¹²¹

In short, future technology and society trends promise to pose continual challenges to the already struggling Navy human resource system.

Budget Trends

Just over a decade ago, the threat to the nation's peace and security was clear and present--a totalitarian superpower whose leadership once had boasted, "We will bury you."¹²² Today that threat is gone, and the financial resources the country is willing to spend on its naval forces have been reduced accordingly.

In a recent Proceedings article, Jerry Hultin contends that the Navy has reduced force strength substantially and taken a nearly ten-year acquisition holiday, postponing modernization, and redirecting our reduced resources to sustain readiness and fund operating expenses. At the same time, there has been a dramatic increase in the pace of operations and deployments--stretching our resources to the breaking point. Often, labor has been substituted for capital or just "made do" with inadequate support. Balancing needs on the backs of sailors cannot continue. Resources--especially technology--must be used smarter to increase productivity and to make life on the deck plates more rewarding.¹²³

Although the Navy's budget has increased from \$79 billion in 1996 to \$91 billion in 2001,¹²⁴ the Navy continues to struggle to pay its bills. This struggle is felt most by the sailors in the trenches and is most obvious in current recruiting, retention, and readiness challenges.

Society Projections

"It is," Senator John McCain said, "a fundamental proposition that armed services can truly serve a democracy only if they are a reflection of that society and are impacted by the same social trends."

George Will counters, "that as American society becomes more individualistic, more self-absorbed, more whiney, in a sense, more of a crybaby nation, it becomes doubly important that the gap between the military and society remain substantial."¹²⁵

Regardless of the viewpoint, there is benefit to examining society's labor trends and demographic make-up to better understand how to motivate the 21st Century sailors that come from that same society. This section will start with an analysis of labor trends and then address the future demographics of the prospective recruiting pool.

Labor Trends

In the early 1900s, traditional industrial theory believed that manual labor productivity could not be improved. Differences in output were thought to depend on whether the worker in question was lazy or hard working, or whether he was weak or strong. But as workers were observed and studied, the idea that outside factors could be changed to alter productivity caught on. The result has been an annual 3.5 percent rise in productivity throughout most of last century.¹²⁶

The process was deceptively simple: observe work and analyze the motions that make up the work. Record the time it takes for each motion, and see which can be eliminated or changed. It became clear that skill was far less important in raising productivity than identifying the best method to do the job. Scientific management was born. In developing countries, scientific management was applied to make low wage workers very productive at low cost.¹²⁷

The techniques developed to increase manual labor productivity are unknown among knowledge workers. When it comes to increasing knowledge-worker productivity, the ignorance is identical to that of managing manual laborers in 1900.¹²⁸ Many of today's sailors can be grouped into the knowledge worker category.

Unlike manual labor, the foremost measure of knowledge-worker productivity is quality. For example, instructional productivity is not measured by how many students a teacher has in a class, rather how those students do on tests and what they learned.¹²⁹

The fact is that many sailors, unlike traditional manual laborers, truly own the means of production. While a laborer requires company equipment for productivity and can't work without it, a knowledge worker is the most important equipment. Consider her or him a capital asset, not a cost. Increasingly, he or she must be made to feel a crucial part of the company.¹³⁰

In the future, more and more people in the work force will have to learn to manage themselves. They will have to place themselves where they can make the greatest contribution to the company, and they will have to learn to develop themselves. They will also need to stay young and mentally alive during what may be a 50-year working life. They will be in charge of their own destinies. These new demands include: discovering own strengths, determining best placement in the company, defining contribution to the organization, taking responsibility for relationships, and planning for the second half of their life.¹³¹

Demographics

Understanding the American people who will serve in the Navy is a necessary part of motivating them towards a common vision. While some will argue that the youth of today will be dramatically different than those of the past, others contend people are people and as such, all will respond predictably to fundamental motivating factors. It is likely that the truth lies somewhere in between.

The age structure of the American population is changing as a result of two trends: life expectancy has grown and the United States is continuing to have zero population growth. Life expectancy at birth in the United States has grown by 20 years since 1929. In addition, a new standard of energy and vitality in the population has pushed old age well into the seventies and beyond. By 2020, the U.S. population will have become somewhat older, with the average age rising from 36.5 to 39 years.

The aging baby boomers are driving this change. The population aged 60 and over will increase from 45 million to 73 million, from 17 to 23 percent of the population, between now and 2020.¹³²

The population of 17 to 26 year olds, the group from which the Navy currently gains most of its military recruits, will increase in size from 37 million to 42.5 million. In spite of this increase in size, however, its share of the overall U.S. population will decrease slightly from 13.5 to 13.2 percent. Also note that increased enrollment at institutes of higher education and the greater demand for skilled employees will further shrink the services' recruiting pool.¹³³

In the United States, there will be a higher proportion of minorities. In the next 20 years, American society and the U.S. workforce will be characterized by a gradual increase in racial/ethnic and gender diversity. Hispanics will make most dramatic gains. By 2020, the proportion of the population aged 17-26 who is minorities is projected as 43 percent. Thus, the expected diversity will include all types, including racial, religious, gender, age, language, cultural, cognitive, and emotive. The last three types of diversity are not well recognized, but have a big impact on people's behaviors, attitudes and motivations in the workplace.¹³⁴

Changing trends in generational demands will require the Navy and Marine Corps to adapt their human resource policies to accommodate the future workforce. Members of Generation X were born between 1966 and 1978. This generation of children has seen higher divorce rates of parents, economic upheaval, and the growth of single-parent households. Generation X values self-reliance, education, and flexibility, and strives for immediate rewards and job security through employability.¹³⁵

Generation Y represents those born between 1979 and 1994. Early assessments indicate that the generation is characterized by a reliance on technology and conspicuous consumption. Most likely, they will value status, flexibility, and education. From employers, they will demand access to technology, continuous learning opportunities, and alternative working environments.¹³⁶

Interestingly enough, a recent UCLA and American Council of Education survey of 250,000 college students in this same generation showed there is reason to believe that military service might appeal to today's young Americans. This study suggests that high school seniors and college freshmen

are more conservative than is generally believed. They seem to want politics to matter; they embrace volunteerism, drink less than their contemporaries in the 1970s and 1980s, and are less inclined to engage in casual sex.¹³⁷

Optimism is quickly countered by national telephone surveys conducted annually by the Department of Defense. These poles reveal that young Americans' interest in joining the armed forces remains low. The 1998 Youth Attitude Tracking Study, used in the formulation of our 1999 recruiting strategy, revealed that only 26% of the young men and 13% of the young women surveyed were willing to consider some form of military service.¹³⁸

Generation Z, those born after 1994, will most likely follow the trends of Generations X and Y. They will display a propensity for technology and rapid information consumption. They will value practical skills, learning and workplace flexibility.¹³⁹

The Veteran proportion of the population has been projected to decrease from 5.5 to 4 percent by 2010. Extrapolating to 2020, that figure drops to 3 percent or less. The declining trend is important because veterans have been shown to significantly influence the propensity of potential recruits to enlist in military service. For example, children of veterans are about three times more likely to enlist than children of non-veterans.¹⁴⁰

The average level of formal education in the United States will be higher, as will be the average level of knowledge and skill. These patterns will be a result of support for formal education as well as pervasive expectations and programs for lifelong learning. There will be a notable rise in those receiving education at community colleges and technical schools--schools that have become increasingly entrepreneurial and willing to work with employers. A shift in learning styles is likely, but the nature of such a shift is difficult to predict. In spite of the average increase in education level, however, sectors of the population will not attain even a minimally adequate education.¹⁴¹

A more educated and more affluent workforce is likely to want work to be a meaningful part of their lives. With options for a range of employment, including self-employment, they want organizations to aid their career development. Organizations that want this kind of worker will have to make changes,

such as giving responsibility for outcomes, creating mutual trust, and having meaningful rewards.¹⁴²

Table 3 lists the most popular of these occupations.

Occupation	1998 Employment	2008 Projected Employment	10 Year Increase	Percent Increase
Computer engineers	299	622	323	108
Computer Support Specialists	429	869	439	102
Systems Analysts	617	1194	577	94
Database Administrators	87	155	67	77
Desktop Publishing Specialists	26	44	19	73
Paralegals and Legal Assistants	136	220	84	62
Personal Care and Home Health Aides	746	1179	433	58
Medical Assistants	252	398	146	58
Social and Human Service Assistants	268	410	141	53
Physician Assistants	66	98	32	48

Table 3
The Ten Fastest Growing Occupations, 1998-2008
[Numbers in thousands of jobs]¹⁴³

Global travel opportunities, as well as other exciting recreational experiences, will continue to expand and be more affordable to most U.S. citizens. The military is no longer the primary option for most young people to see the world, experience adventure, or operate complex, innovative equipment.¹⁴⁴

Studies show that by age 22, a civilian worker has already held four full-time jobs since leaving school. In fact, men hold on average seven full time jobs in their first ten years in the labor force. Three trends are associated with changing jobs early in a career. First, job shopping when young leads to better matches, greater productivity, and possibly involves promotions. Second, payoff from changing jobs is a relatively high 12% salary increase in the first ten years in the labor force compared with 7% by staying at a job another year. Lastly, most workers eventually establish long-term employment and settle-down by the mid-20s.¹⁴⁵

One final aspect worth noting is the pace of American society. Since 1965, the average news sound bite has shrunk from 42 seconds to just eight. The average network TV ad has shrunk from 53 seconds to 25. Fifteen-second ads are now commonplace, and three-second ads are on the rise.

Multitasking is in. Downtime is out. America is a super-mobile, hyper-connected, media-saturated society, where tension relief is a growth industry. The average American office worker sends or receives

201 messages a day--voice mail, E-mail, faxes, and the occasional Post-it-Note. Cell phones, pagers, and hand-held computers ensure we're always plugged in--always on call. Edward Hallowell of Harvard contends the interactions these devices produce are fleeting and collectively they leave people feeling distracted and restless.¹⁴⁶

In summary, the changing population, the growing economy and resulting low unemployment rates, and the changing social conditions all affect a military force that depends on volunteers. The successful organization and nation of the future will draw from all people--no matter their gender, ethnicity, or personal style. While future demographics will be debated for some time, one certainty is that the basics of human nature, both good and bad, will not change. Enterprises in all sectors of society can no longer afford to neglect the greatest unlimited resource on the planet--our diverse human talent.

Society Motivations

"We are at war for people."
- Chief of Naval Operations¹⁴⁷

In the words of Sun Tzu, "Know the enemy and know yourself; in a hundred battles you will never be in peril."¹⁴⁸ An analysis of the civilian competition is first required to win the people war. This section is devoted to provide a snapshot comparison of the most popular Navy benefits to those found in the civilian employment sector.

Next to a primary salary, additional monetary rewards such as bonuses are commonly used to illicit short-term responses in employee motivation. Most companies have begun to change their incentive pay or benefit programs in response to tightening labor markets. Change has been precipitated by the fact that nearly 80 percent of surveyed workers say that benefits are very important in their decision to accept or reject a job.¹⁴⁹ In fact, some observers have suggested that the military's recruitment and retention woes stem from its inability to compete with some of the benefit and incentive offerings listed in figure 9.

Bonus and Award Programs in Large Firms

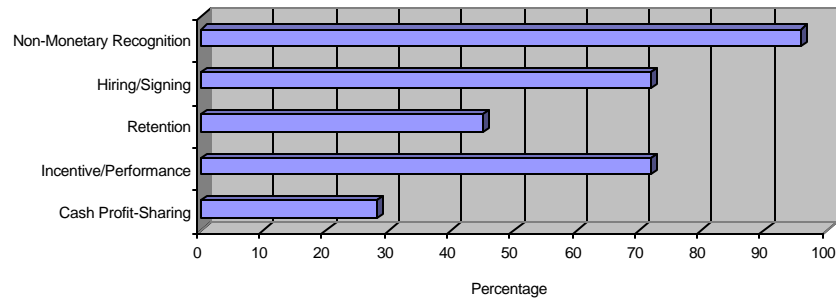


Figure 9
Percentage of Large Firms Offering Bonus and Award Programs¹⁵⁰

Team-based incentives, which offer additional compensation to employees based on the performance of their workplace team, have recently become more pervasive in private-sector companies. Data from the Center for Effective Organizations (CEO) show that 81 percent of Fortune 1000 companies offered work-group or team incentives in 1999, up from 59 percent in 1990.¹⁵¹

Paid Leave Offerings

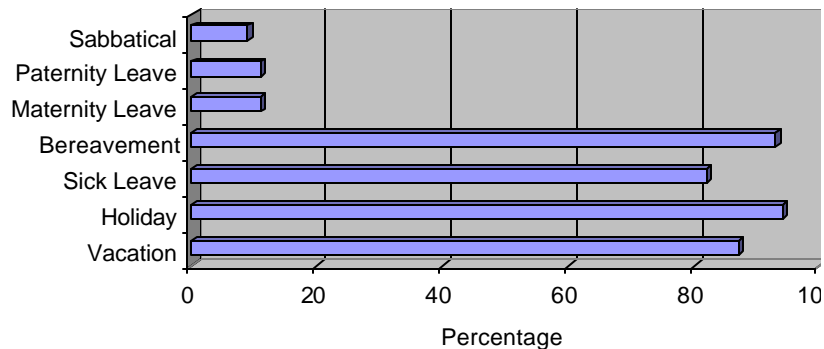


Figure 10
Paid Leave Offerings in Companies with 2500 or More Employees¹⁵²

Paid leave is a benefit employees can expect in most companies with 2500 or more employees as shown in figure 10. The standard benefits covers vacations, holidays, sick leave, and bereavement periods.

Health insurance is a very important benefit in the private sector, with virtually all large firms offering this benefit. In the private sector, employees typically share the costs of health care through

direct contributions, co-payments, and deductibles. Watson Wyatt reports that 92 percent of for-profit companies with 2,500 or more employees require an employee contribution. Survey data show that the average monthly employee premiums for single coverage were between \$26 and \$39, and co-payments for office visits averaged around \$12.¹⁵³

Retirement is also a predominant benefit in the private sector, about which volumes have been written (figure 11). As was the case in health insurance, the interesting trend is the change in its structure over time. Since 1980, the share of medium and large companies with defined benefit plans has been steadily falling as the share with defined contribution plans has been rising rapidly. In fact in 1998, 78.3 percent of firms with 500 or more employees offered 401(k) plans in 1998.¹⁵⁴

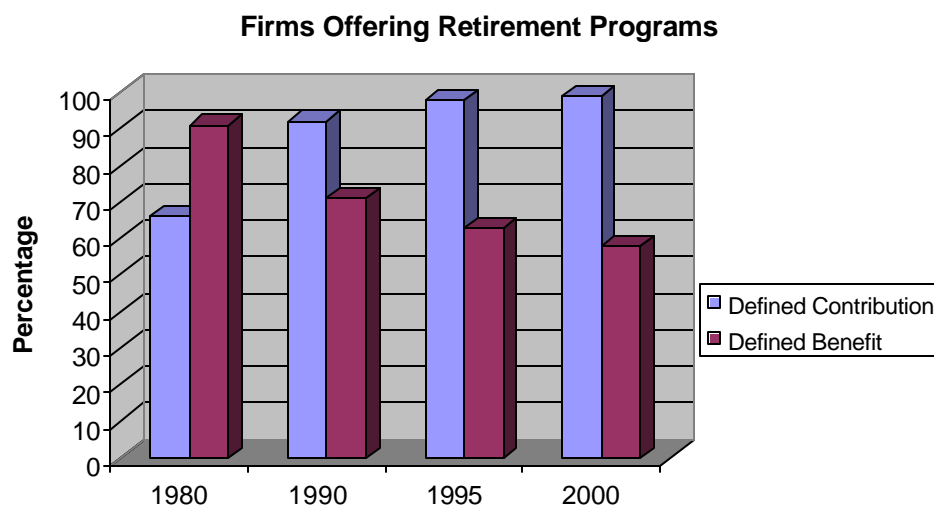


Figure 11
Percentage of Companies That Offer Retirement Benefits¹⁵⁵

Surveys report an average of 81% of most large employers offer tuition reimbursement to their employees.¹⁵⁶ While some large firms offer housing benefits depicted in figure 12, virtually all are in the form of financial offsets or loans, not the direct provision of housing.

Most large companies offer some form of childcare assistance to their employees, and the share offering such assistance is on the rise. Hewitt Associates reports that 90 percent of medium and large companies today offer some child care assistance today, up from 84 percent in 1994. On site or near-site childcare is not that common with only 10 percent offering that benefit. Rather, most firms provide

spending accounts to offset child-care costs, and between 33 and 42 percent of firms offer child care referral services to employees.¹⁵⁷

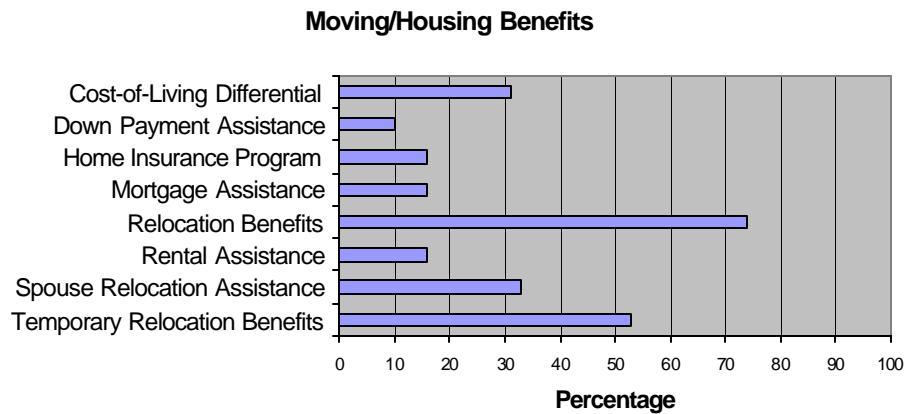


Figure 12
Percentage of Large Firms Offering Housing/Moving Benefits¹⁵⁸

Elder Care is a relatively new employee benefit, currently offered by an estimated 17 to 47 percent of large firms, with elder care resource and referral services being the most prevalent.¹⁵⁹ Flexible work arrangements have become increasingly prevalent among large, private-sector companies in recent years (figure 13).¹⁶⁰

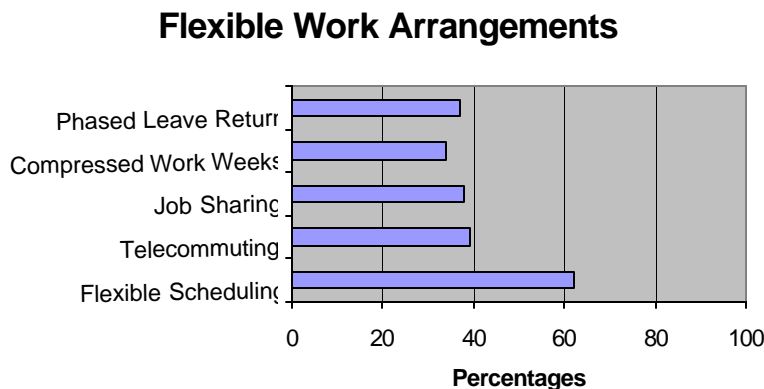


Figure 13
Percentage of Large Companies Offering Flexible Work Arrangements¹⁶¹

Miscellaneous benefits include casual dress policies offered by 60 to 91 percent of large firms. Most large firms also offer their workers professional development opportunities. An estimated 27 percent of large firms offer legal assistance, and between 17 and 37 percent offer financial planning services. Lastly, between 33-37 percent of large firms now offer "flexible benefits," allowing workers to

pick and choose from an array of health, retirement, and leave benefits to design a benefit package that best suits their individual needs.¹⁶²

After a comparison of civilian sector benefits, it appears that the Navy competes fairly well, and in some cases, exceeds corporate plans.

Chapter 5: 21st Century Warrior Motivation

The goal of an efficient 21st Century Navy should be to effectively harness the intellectual capital of its sailors, and motivate them towards a common 21st Century vision. Instead of an organization consisting mainly of short term employees--86% of today's sailors leave at their first opportunity--a better model is one where sailors are engaged, committed, and willing to make the ultimate sacrifice in support of the Navy's mission.

This section will provide a top down approach to transforming today's Navy. First, a common Navy vision will be discussed to align the diverse organization towards a common purpose. As the Navy fundamentally exists to send warfighting ships to sea, manning those ships with trained and motivated sailors is a primary requirement. Evidence suggests that today's sea duty is becoming less attractive to both current sailors and prospective recruits. Thus, the Navy likely will need to change the way it sends ships to sea to better motivate future sailors. Finally, a discussion of more traditional influences on sailor motivation will be provided before concluding with organizational changes and leadership initiatives required to complete the transformation.

A Common and Effective 21st Century Vision

As previously stated, today's Navy vision is, "We must provide, as a part of joint and combined operations, credible, combat-ready naval forces that sail anywhere, anytime as powerful representatives of American sovereignty" (Appendix A). While technically correct, this statement offers little help to sailors as they address day-to-day challenges of operating a \$91 billion organization of 723,927 active, reserves and civilian personnel operating and supporting 315 ships around the world.¹⁶³ Today's sailors are forced to make decisions without regard for the total Navy organization, often resulting in conflicting actions, degraded readiness, and overall organizational inefficiency.

An ideal vision is one that provides a practical and concise alignment of the huge organization and its diverse tasks towards a common goal. This vision cannot be developed in a historical top down manner or by a lone author of an advanced research project. Rather, an effective Navy vision is a collective product of a group that represents the entire organization and its incredibly diverse tasks. Thus, a lasting end product will emerge that has simplistic relevance to daily naval operations around the world.

Although this paper purposely omits a specific 21st Century Navy vision, it assumes the foundation of the vision will be to motivate sailors to achieve optimal warfighting readiness. The vision will not be another phrase to merely frame and hang on each work center's wall. Instead, it will be a concept that will be used to align an improved Navy organization, to overhaul the current Navy human resource system, and to revamp the leadership process. It will be instilled in every sailor during boot camp, and will be refreshed in every leadership course individuals are exposed to as they progress in the Navy organization.

Given the current status of the Navy and its projected future, a new vision will undoubtedly require increased operational efficiency, improved warrior motivators, updated organizational alignment, and modern 21st Century leadership.

Increased Operational Efficiency

The Navy exists fundamentally to project power globally from the sea; a warfighting capability that essentially has been uninterrupted for over 200 years. Inherent in the task is the requirement for relatively slow travel and lengthy family separating deployments. In addition, the Navy must operate the most sophisticated maintenance intensive weapon systems in harsh saltwater environments. Finally, the Navy is constrained by the other services' pay scales, often for compensation of completely different tasks.

Table 4, a synopsis of a past survey of personnel leaving the Navy, lends some insight into the areas of employee management that the 21st Century Navy will need to address. Arguably most of the top five reasons for leaving can be addressed in part by providing national security more efficiently.

Rank	Reason
1	Base Pay
2	Family Separation
3	Leadership/Management
4	Promotion/Advancement
5	Overall Quality of Navy Life

Table 4
Top Five Reasons for Leaving the Navy¹⁶⁴

Family separation has been a sea-going reality since man first went to sea. For much of the fleet, time away from home is driven mainly by fleet work ups and subsequent six-month deployments. Any decrease in operational commitments gained by added efficiencies, would minimize family separation.

Although difficult to quantify, overall quality of Navy life is intuitively tied to the way the Navy currently deploys. Many believe that improvements in Naval operations would also yield a better overall quality of life for its sailors. In fact, a common perception has emerged that personnel and operational tempo currently exceed reasonable limits and are stretching finite resources to the extreme. These fundamental issues are central to the Navy's mission, operations, and leadership. They require evaluation for their impact on the Navy's ability to recruit and retain high-quality personnel.¹⁶⁵

A critical aspect of Naval operations is being prepared for an uncertain future. Admiral Reason observes,

"It is just not at all easy today to peer into the future and make reliable predictions. The list of unknowns include: No one knows who the enemy will be, if the enemy will be a state or an organization, what weapons and technologies the enemy will have, when the enemy will strike, what the enemy's objectives will be, what tactics the enemy will use, what rules the enemy will observe, or what rules the Navy will be allowed to use."¹⁶⁶

Because of this uncertainty, any improvement to deployment and operating practices needs to bring about a flexible Navy prepared to deal with an uncertain global environment.

Providing National Security

The Navy is a tool for U.S. policy makers to support American national interests around the globe. Historically, there is a political delay from the time politicians decide to use a military response to

actual weapons employment. This political pause is typically a minimum of 14 days in today's relatively peaceful international climate.

Current Inefficiencies

The efficiency red flag is raised considering the fact that the U.S. Navy provides national security today in essentially the same manner as it did 50 years ago during the cold war. Regardless of the world's political climate, the Navy consistently deploys its assets in large groups of ships for the same length of time. Today, there are currently two carrier battle groups and two amphibious ready groups deployed for six months at any one time. This posture evolved from individual ship's contributions to the group's total warfighting package. For example, although the aircraft carrier was the platform of choice for projecting power ashore, it required the capabilities of accompanying submarines and small ships for anti-submarine warfare and anti-air defenses. Prior to the 1990s, small ships and fast attack submarines had limited ability to project power ashore on their own.

Today, GPS and Tomahawk technological advancements have transformed most U.S. fast attack submarines and AEGIS ships into formidable land power projection units of their own. While the Tomahawk missile response is not a substitute for the striking power of an aircraft carrier, it does provide an immediate response option to theater CINCs.

The constant Navy posture in light of a changing political climate suggests there are inefficiencies in the way the service provides national security to the American people. Two targeted areas for increased 21st Century efficiency emerge as: Group deployment composition and deployment durations.

Appendix B offers an alternative to deploying ships in Battle Groups for six month periods. The benefits of the initiative include less sailor time away from home, decreased work-ups, more attractive and frequent port visits, and well coordinated personnel transfers for increased Unit Cohesion. To motivate and harness sailor intellectual capital, the 21st Century Navy might need to provide today's amount of national security with decreased time away from home and better port calls.

In summary, the Navy's rigid deployment model should be modernized to provide flexibility and scalability for the future FORCEnet concept. In the process, increased efficiencies will improve many top motivational factors for the 21st Century Sailor. Although alternate deployment modes would offer little direct financial savings, human resource management improvements and corresponding increases in personnel readiness warrant further exploration of new ways to provide national security.

Naval Evolution

If well understood and intentionally harnessed, the evolutionary processes also can be a powerful way to stimulate progress and motivate the workforce. For example, Wal-Mart's phenomenal success in the 1970s and 1980s can better be understood from an evolutionary perspective than a creationist perspective. As Jim Walton summed up, "We all snickered at some writers who viewed Dad [Sam Walton] as a grand strategist who intuitively developed complex plans and implemented them with precision. Dad thrived on change, and no decision was ever sacred."¹⁶⁷ For example, Wal-Mart's famous people greeters did not come from any grand plan or strategy. A store manager in Crowley, Louisiana, was having trouble with shoplifting, so he tried an experiment: He put a friendly older gentleman by the front door to "greet" people on their way in and out. The "people greeter" made honest people feel welcome. At the same time, the greeter sent a message to potential shoplifters that someone would see them if they tried to walk out with stolen merchandise. This odd experiment proved effective and eventually became standard practice across the company and a competitive advantage for Wal-Mart.

In another example, 3M began life as a failure. Dealt a nearly lethal blow when its initial concept to mine corundum failed, the tiny company tried for months to come up with something that might prove viable. The board of directors met every week during the cold November of 1904, seeking a solution. The founders were determined not to give up. Fortunately their employees felt the same way. Everyone offered some personal sacrifice including some working for free to keep the company going. Finally, the board agreed to the suggestion by one of its investors that 3M should shift away from mining and become

a manufacturer of sandpaper and grinding wheels. So, out of desperation more than careful planning, 3M gave up mining and made a strategic shift to abrasives.¹⁶⁸

Although the invention of the Post-it note might have been somewhat accidental, the creation of the 3M environment that allowed it was anything but an accident. Post-it co-inventor Art Fry described, "One day in 1974, while I was singing in church choir, I had one of those creative moments. To make it easier to find the songs we were going to sing at each Sunday's service, I used to mark the places with little slips of paper. I thought, Gee, if I had a little adhesive on these bookmarks, that would be just the ticket."¹⁶⁹ If Art Fry had been in an environment that discouraged persistence or doodling around, 3M Post-it notes wouldn't exist.

James Collins believes there are five lessons for stimulating evolutionary progress: 1) Give it a try and quick, 2) Accept that mistakes will be made, 3) Take small steps, 4) Give people the room they need, and 5) Create the alignment and mechanisms for change.¹⁷⁰ The Navy is itself a product of over 200 years of evolution. For more than 30 years our sailors spent countless man-hours safety checking all personal electric and electronic gear that came on board our ships (i.e. electric shavers, portable radios, etc.). Originally well intentioned and designed to safeguard sailors from inferior consumer products, the program continued to grow, even though consumer equipment became much safer. In contrast, each year approximately four million people ride cruise ships safely, without having their personal belongings confiscated, safety checked, tagged, and returned. When hard data were examined as part of the Fleet Review Board (FRB) process, the Navy and the cruise ships were found to have similar safety records. Based on data and not emotion, the program owner realized there was an infinitesimal risk--but a tremendous burden lifted--by scrapping the entire personal electrical safety program.¹⁷¹

Similar steps are being made towards reduced manning and generally, doing daily functions more efficiently. The Navy's technology demonstration project--Smart Ship--is breaking old paradigms for watch standing and preventive maintenance as a way to reduce manning. Instead of the traditional model in which everyone is a watch stander, the Smart Ship uses a Core-Flex model. This approach involves

separate watch standing and work teams, which is estimated to reduce the workload by about 30 percent and the overall manning by about 12 percent.¹⁷²

Although hard to quantify, improving daily efficiencies and continual progress benefits the sailor's overall quality of service and maximizes his contribution to warfighting readiness.

Improving Warrior Motivators

The 8th Quadrennial Review of Military Compensation conducted in 1997 concluded, "A comprehensive review of the compensation system, therefore, requires that it include anything that the service member may value and desire and that the Navy is able or willing to offer. Every component that can provide something that service members value ought to be included in the design of compensation systems for the 21st Century."¹⁷³ The need for a coordinated Navy human resource effort that aligns warrior motivators towards a single vision is clear.

Increased Warrior Stability

Time Off/Free Time

"Clearly the Navy needs a new methodology for requirements determination that links workload requirements to human resource availability and cost."

- Navy Personnel Task Force, Oct 2000¹⁷⁴

Current active duty manpower requirements do not reflect the way the Navy operates and are based on unrealistic assumptions about the length of a workweek. The operational requirements determination process does not capture the true workload for ships and squadrons, and manning requirements are inconsistent among claimants who are allowed to use different methods to determine workload.¹⁷⁵

Complicating the issue is the fact that requirements determination is a diverse process, with 13 resource sponsors, 44 major claimants, and even greater numbers of sub claimants and activities. The bottom-up requirements that they generate conflict with top-down constraints on end strength, top-six

strength, and funding, resulting persistently in unfounded requirements and increased shipboard workloads.¹⁷⁶

Despite a high 81.0 hour sailor workweek in comparison to a typical civilian 40 hour week, the Manual of Navy Total Force Manpower Policies and Procedures seems to encourage exceeding these astronomical limits.

The Navy's standard workweeks are key elements in the calculation of Navy manpower requirements. They are guidelines for sustained personnel utilization under projected wartime or peacetime conditions and are not intended to reflect the limits of personnel endurance. They are for planning purposes only and are not restrictive nor binding on commanders or commanding officers in establishing individual working hours.¹⁷⁷

Perhaps a better requirements' determination might start by asking, what is an ideal sailor workday and how much free time does it include? Given that constraint, how many sailors are required to man specific units? As long as these questions remain unanswered, Navy leadership will continue to overwork sailors in relation to the amount of positive motivators they receive. Today's leadership has not been constrained by congress on how much free time it gives its sailors, and consequently has developed a perceived "sailor's time is free" mentality. Arguably, as leisure time becomes more precious, its relative value as a motivator will increase.

Minimize PCS Moves

Although estimates vary, there are approximately 210,000 moves performed per year in the Navy.¹⁷⁸ In addition to being fiscally demanding on the organization as well as disruptive to unit readiness, it presents a large personal burden on individual sailors. Figure 14 shows that a majority of sailors would homestead if given the opportunity. The problem is that despite all the advantages of homesteading and disadvantages of moving, the Navy organization via selection boards is perceived to favor those who diversify by moving to new jobs and locations.

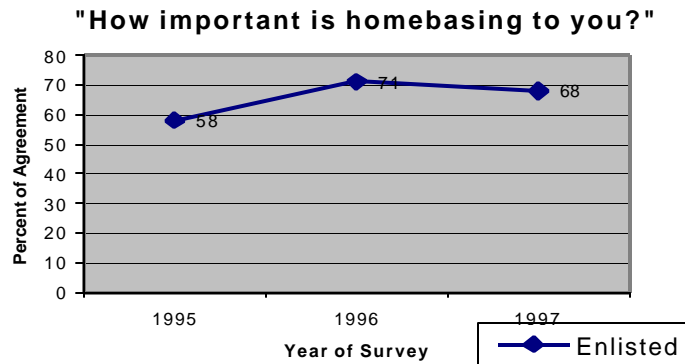


Figure 14
Home Basing Results, Navy-Wide Personnel Survey (1990-1997)¹⁷⁹

A common Air Force phrase is that the service "recruits individuals, but it retains families." The moving burden can have a great impact on sailors' families. Fifty years ago, less than one-third of women were in the labor force, and women constituted only a small percentage of the armed forces. Today, nearly three in five women are in the labor force, and women constitute about 14 percent of the armed forces.¹⁸⁰ The combination of these two factors has made dual-career families much more of a norm in military service.

Accommodating home-basing is achievable, especially in fleet concentration areas such as San Diego and Norfolk. The Navy should not let a good productive employee go simply because he or she does not want to move. Thus, leadership should explore making this a culturally viable option to interested sailors.

Better Defined Career Path

Today's naval career management can be best described as a reactionary last minute process. For both officers and enlisted, detailers typically don't communicate with individuals until one year before expected projected rotation dates (PRDs). As a result, it is not uncommon for a family to be notified of cross-country or even international moves a mere couple of weeks before the actual permanent change of

station (PCS) date. This is inadequate for the planning required for arranging adequate spousal employment, housing, and dependant school enrollment.

For officers especially, this short notice is generated by policy that details an individual into his next job based upon performance in his last job. This performance assessment is in the form of a periodic evaluation that usually occurs at the end of the individual's tour.

An underlying message the organization conveys to sailors is one of short-term value. The Navy values its warrior's services only until the completion of his or her current tour, at which time the individual will be re-evaluated for follow-on assignment. What Navy leadership doesn't realize is that the individuals are performing their own evaluation on the Navy's lack of commitment and are responding with their own decisions to leave for a more stable and rewarding environment.

Figure 15 suggests that not all sailors are unsatisfied with an uncertain career development. While some sailors may not want to commit to a long-term career path, the option should be available for individuals to define their futures, say for the next five years, especially if that future includes a life-changing move.

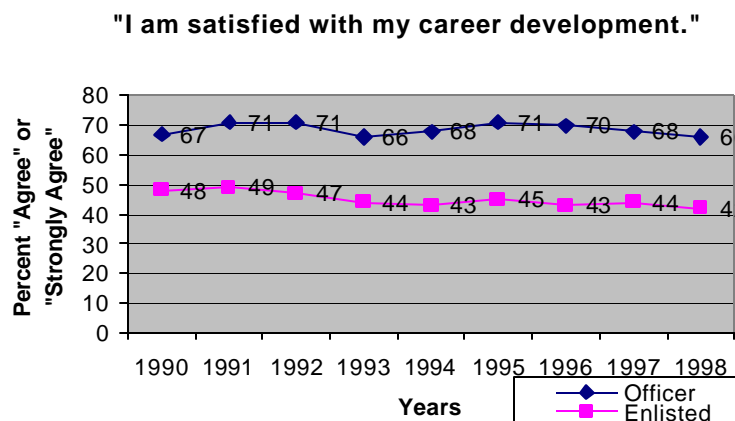


Figure 15
Career Development Assessment, Navy-Wide Personnel Survey (1990-1998)¹⁸¹

Family Support

The explosion of opportunities for women in the United States has had a host of effects, as seen in figure 16. With such an overwhelming majority of married sailors, the 21st Century Navy will be forced to address the needs of the spouse if it hopes to motivate those warriors. As previously discussed, a home-basing option would provide the prospect of significant service in one homeport without jeopardizing an individual's chance for due-course promotion and command selection.

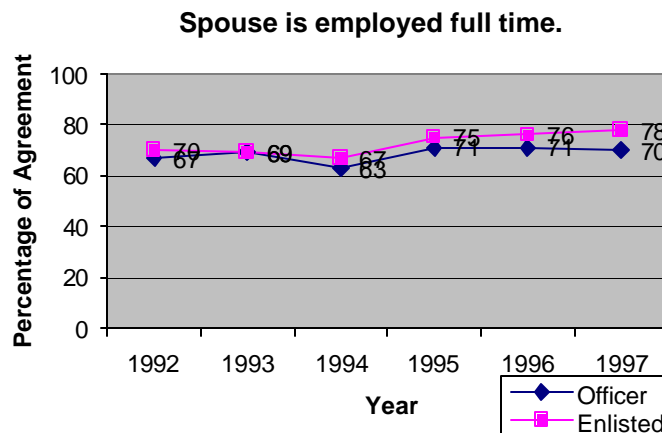


Figure 16
Spouse Employment, Navy-Wide Personnel Survey 1990-1997¹⁸²

If the sailor decides to move, a credible headhunting service would help alleviate spousal future employment concerns. Navy Family Service Centers attempt to help relocated spouses find work, but they generally are ill suited to place spouses with executive-level abilities. The Navy should outsource this effort to reputable executive placement firms skilled in obtaining niche positions for highly qualified candidates. The contention that wives aren't around long enough to benefit a business is minimized in modern times of a highly mobile workforce.¹⁸³

There are many scenarios in today's society where a child's school or a spouse's employment would lead to a sailor's decision move without the family. Currently, there are few Navy policies that recognize or compensate sailors for making this incredible sacrifice for the organization. A future Navy human resource vision might address the geobachelor reality and attempt to alleviate some of the

associated financial, housing, and travel burdens. One such initiative might be to partner with the airlines to provide short-noticed discounted tickets to qualifying geobachelors.

The Navy is already exploring the prospect of providing limited education benefits to Navy spouses. Perhaps this concept could be expanded along the lines of today's Tuition Assistance Program.

Medical care is a critical component of the employee benefits package for all employers, but the Department of Defense can no longer claim to provide a competitive health care benefit. The quality of health care in operational conditions is unchallenged, but there is widespread dissatisfaction about peacetime care (TRICARE), including issues of access, quality, and the cost of private care when military facilities are unavailable.¹⁸⁴

Part of the problem stems from the Military Health System's efforts to perform two separate and not necessarily consistent missions: medical readiness and peacetime care. Attempts to satisfy both mission requirements with limited resources has resulted in deficiencies in meeting the objectives. The provision of peacetime care has borne most of the shortfalls. As a compensation benefit, the military health care system is widely regarded as a disaster despite its high cost.¹⁸⁵

Compensation

Figures 17 and 18 confirm the notion that although the majority of sailors--especially enlisted personnel--believe their pay is inadequate for the job they perform, most don't site it as a reason to leave the Navy. In other words, it's not only about the money. While not the only contributing factor to warrior motivation, it is undeniably an important one and can be improved.

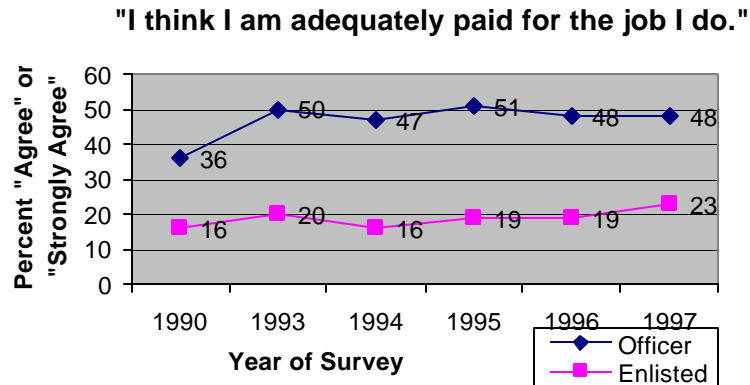


Figure 17
Pay Assessment, Navy-Wide Personnel Survey (1990-1997)¹⁸⁶

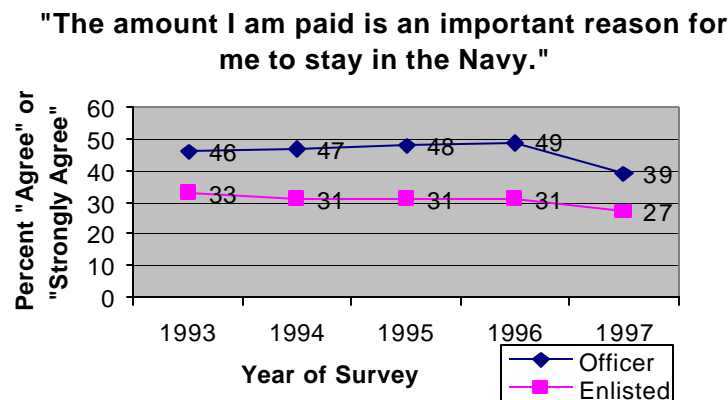


Figure 18
Pay as a Motivator, Navy-Wide Personnel Survey (1990-1997)¹⁸⁷

The 8th Quadrennial Review of Military Compensation recommended a change in the current pay table to move toward a greater "pay for performance" type scale. Basic pay is currently the principal vehicle for recognizing performance, where performance is reflected in promotion to the next higher pay grade. Increases in the basic pay table stem from two sources: from years of service (unrelated to performance) and from promotion, which is widely accepted as resulting from superior performance. Ad hoc changes to the basic pay table over the past 45 years have distorted the relative importance of these increases so that longevity weighs more heavily than promotion. As a result, the dollar spread between pay rates of different grades at similar years of service is, in some cases, too small to produce a clear reward for promotion. Therefore, restructuring the basic pay table to emphasize promotion over longevity

as the primary reason for pay increases will send the positive signal to every service member that his or her superior performance is valued and will be rewarded.¹⁸⁸

As for the need for skill-based pay, the Navy currently has many tools at its disposal such as selective reenlistment bonuses SRB, enlistment bonuses, faster career paths, early promotions, and special bonuses including nuclear, aviation, and medical incentive pays. It is likely future compensation packages will require heavy reliance on bonuses, with perhaps 25% of pay in bonuses, to compete with civilian employers.¹⁸⁹

Perhaps the real need for reform stems from the fundamental requirement for sailors to take ships to sea. Today, many sailors feel that the negative aspects of going to sea outweigh the positives. Is there any way to turn a detractor into an enhancer for both the Navy and the individual?

In a recent study, it was determined that outsourcing shore billets or eliminating some altogether would lengthen the average sailor's time on sea duty relative to shore duty. Given this, the Navy would have two compensation-based options. It could mandate longer sea tours and use selective reenlistment bonuses (SRBs) to buy back the resulting drop in retention, or it could use a sea pay premium to get sailors to voluntarily extend sea duty. Studies have shown that using a sea pay premium to meet the new sea/shore requirements would be more cost-effective than using SRBs, and its cost would be about half of the projected personnel savings from outsourcing military billets.¹⁹⁰

If shore duty exists just to support a sea-shore rotation, eliminating those jobs would free up associated resources to better compensate sea-going billets. Perhaps if the Navy offered up a back-to-back sea option and compensated folks appropriately, they might see sea duty become more attractive to its sailors.

Assuming a sailor's employment value to the Navy is measured by sea duty, figure 19 compares a rough analysis of sailor compensation using today's sea/shore model versus an alternative model. Instead of rotating a sailor ashore after sea duty to charge up his batteries, this model offers the choice to do back to back sea duty, but receive time and a half for the added burden. Thus, a sailor gets to homeport and receives a 50% pay increase for going to sea. In this example, the Navy would save \$42K in salary alone,

three years of providing benefits, and the cost to retrain the individual prior to the second sea tour. The end result is a win-win for financially motivated sailors and the Navy.

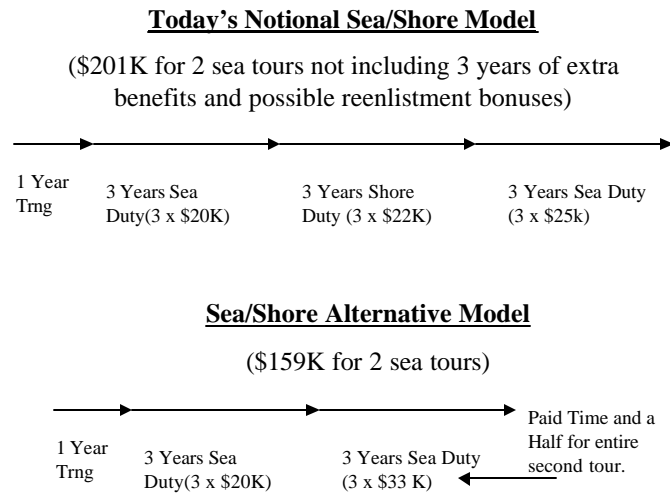


Figure 19
Comparison of an Alternative Compensation Model

This is one of many creative alternatives the 21st Century Navy might evaluate for applicability in a changing environment. Other possibilities include team associated bonuses connected to achieving a desired unit safety rate, readiness level, or retention goal.

Although the military pay structure is relatively constrained by congressional law, it does contain almost every mechanism required to properly reward desired performance. What is missing from the Navy's pay policies is a comprehensive overall alignment required for an efficient and motivated workforce.

Overhaul the Culture

"I believe when you look at the culture of an enterprise, it must start at the top. It is the responsibility of the CEO, the president, and all the senior executives to set the tone for a culture based on the values,"¹⁹¹ says Kathleen Black, President and CEO of Newspaper Association of America. Since culture is the greatest determinant of organizational behavior, leaders have a significant responsibility to implement processes that ensure a healthy culture.

Many believe the current Navy perceived culture is dominated by protectionism, zero defect mentality, political correctness, careerism, risk aversion, static, lacking innovation, and overwhelming bureaucracy. In addition, people are viewed as an expendable, free resource. The desired culture is one that values the immense intellectual capital of people. Included is the value of people over ships, principle over practice, quality over quantity, effectiveness over efficiency, and character over competence. People are not only empowered, but also enfranchised with a sense of belonging and ownership.¹⁹²

The Navy also has the reputation of being the service most resistant to change. Unfortunately, that reputation has a basis in fact.¹⁹³ To counter that perception requires more of a change in attitude and cultural mind-set, than the creation of a new executive panel or an "open mind, sensitivity training stand-down."

"People would always say to my father, 'Gee Whiz, you've done real well. Now you can rest.'
And he would reply, 'Oh, no. Got to keep going and do it better.'"

- J. Willard Marriott, Jr., Chairman, Marriott, 1987.¹⁹⁴

Continuous improvement is an institutionalized habit in a visionary company. It is ingrained into the fabric of the organization and reinforced by tangible mechanisms that create discontent with the status quo. Comfort is not the objective in a visionary company. Visionary companies install powerful mechanisms to create discomfort and thereby stimulate change and improvement before the external world demands it.¹⁹⁵

Concerning the future, managers at visionary companies simply do not accept the proposition that they must choose between short-term performance and long-term success. They build first and foremost for the long term while simultaneously holding themselves to highly demanding short-term standards. The downfall of Howard Johnson's resulted primarily in complacency. As Howard Johnson, Jr. described in a 1975 interview: "We are a reacting company. We don't try to anticipate the future. In this business, you can't look too far ahead, maybe two years."¹⁹⁶ Howard Johnson became overly focused on cost control, efficiency, and short-term financial objectives. A former Howard Johnson executive commented: "Ho Jo always seemed to have ideas to upgrade the restaurant and hotels, but they never wanted to spend

the money."¹⁹⁷ Many see the current Navy culture as one of reaction, where it can't "look too far ahead, maybe two years."

Unit Cohesion

Unit cohesion is a concept where a crew is kept together for the entire Integrated Deployment Turnaround Cycle (IDTC) and the subsequent deployment. The belief is that the resulting team building and cohesion result in a higher level of readiness. Although this concept poses challenges on the human resource effort, team building is a free motivator and should be pursued.

Unit cohesion currently isn't an encouraged practice. Today, the Navy has difficulty filling all deploying billets before a unit deploys (currently approximated 7,000 gapped deploying billets), not to mention accomplishing this feat before the IDTC even begins. Sailors are being managed as 369,563 individuals, not as a set of warfighting teams.

Today, technological advances can offer the ability to manage personnel flow to meet unit cohesion needs. In addition, a more efficient Navy that no longer deploys in battle groups of approximately 10,000 personnel but rather in smaller groups of two and three ships, would help to better match transferring personnel with a unit at the right time in their deployment cycle.

The most logical first step towards an ideal 21st century unit cohesion model would be to start with an achievable goal of no personnel transfers for a six month period, beginning two months before a unit deploys and ending four months into the cruise. This window can be expanded as a system matures to meet the new requirement.

Thus, a likely 21st Century Navy requirement will be to adopt a more holistic human resource effort coordinating how we deploy, when bodies come and go, and when they are trained.

Better Defined Core Values/Purpose

A critical issue is not whether a company has the right core ideology or a likeable core ideology

but rather whether it has a core ideology that gives guidance and inspiration to people within that company. The visionary companies don't merely declare an ideology; they also take steps to make the ideology pervasive throughout the organization and transcend any individual leader.¹⁹⁸ In a visionary company, the core values need no rational or external justification. Nor do they sway with the trends and fads of the day.¹⁹⁹ James Collins explains, "If an organization is to meet the challenges of a changing world, it must be prepared to change everything about itself except its basic beliefs. The only sacred cow in an organization should be its basic philosophy of doing business."²⁰⁰

The Navy's core values and purpose becomes another aspect of overall sailor motivation. A spouse of an IBM employee observed in 1985, "IBM is really good at motivating its people; I see that through Anne. [She] might be brainwashed by some people's standards, but it's a good brainwashing. They really do instill a loyalty and drive to work."²⁰¹ Visionary companies are often compared to cults with their fervently held ideology, indoctrination, tightness of fit, and elitism. IBM attained its greatest success-- and displayed its greatest ability to adapt to a changing world--during the same era that it displayed its strongest cult-like culture.²⁰²

Visionary does not mean soft and undisciplined. Rather because the visionary companies have such clarity about who they are, what they're all about, and what they're trying to achieve, they tend to not have much room for people unwilling or unsuited to their demanding standards.²⁰³

A key challenge for the 21st Century Navy is to be highly ideological and highly progressive at the same time, while preserving the core and stimulating progress. This is a task that will generally fall on leadership's shoulders.

Creativity/Innovation Initiatives

Many folks recognize the need for innovation and creativity in the Navy. True innovation is the driving force not only for individual organizations but also for entire economies.²⁰⁴

Dave Packard, co-founder of Hewlett-Packard Company, addressed the fundamental challenge in a 1964 speech, "The problem is, how do you develop an environment in which individuals can be

creative? I believe you have to put a good deal of thought to your organizational structure to provide this environment.²⁰⁵ Thus, the Navy's organization is key to fostering innovation. It must be fluid in a sense that ideas can flow effortlessly from one part of the enterprise to another without having to pass through stovepipes.²⁰⁶

To sustain the pace of innovation, the Navy must build a culture of continual change and next-generation learning. Learning must be continuous and service-wide, enabling an organization to capture a set of sustainable benefits that define innovation. An organization must also gather ideas from every corner of its extended enterprise. For example, British Petroleum was able to transform itself from a debt-ridden and divided behemoth into a sleek, flexible and innovative organization. At the heart of the transformation were cross-unit performance improvement teams that encouraged cross-unit and enterprise-wide learning.²⁰⁷

Next-generation companies lift the performance of their employees by freeing the initiative, creativity and drive inherent to each one--a far cry from the stifling confines of the traditional corporate environment. The programs these companies put in place to help employees develop individual capabilities and collective competencies lead employees to view the workplace as a place where they can attain their personal and professional goals. This, in turn, leads to increased levels of creativity and lower rates of turnover.²⁰⁸

Many believe young officers and sailors must be able to learn and grow, but today's Navy leaves little room for error. Chester Nimitz grounded his ship twice; yet his superiors recognized his potential and he went on to lead our forces to victory in the Pacific in World War II.²⁰⁹ The Navy would be wise to remember that an officer who risks nothing learns nothing. The 21st Century Navy will likely be one where experimentation, and both the ensuing evolutionary progress and associated failures, are part of the culture.

Charles Darwin stated in 1859 that, "To my imagination it is far more satisfactory to look at [well-adapted species] not as specially endowed or created instincts, but as small consequences of one

general law leading to the advancement of all organic beings--namely, multiply, vary, let the strongest live and the weakest die."²¹⁰

Richard P. Carlton, Former CEO, 3M Corporation, comments in 1950, "Our company has, indeed, stumbled onto some of its new products. But never forget that you can only stumble if you're moving."²¹¹

R.W. Johnson, Jr., Former CEO, Johnson & Johnson similarly notes, "Failure is our most important product"²¹² J&J stumbled upon one of their most famous product by accident. In 1920, company employee Earle Dickson created a ready-to-use bandage--made of surgical tape with small pieces of gauze and a special covering so it would not stick to the skin--for his wife who had a knack for cutting herself with kitchen knives. When he mentioned his invention to the marketing people, they decided to experiment with the product on the market. Eventually, after a slow start and a never-ending process of tinkering, Band-Aid products became the biggest selling category in the company's history and further solidified J&J's "accidental" strategic move into consumer products.²¹³

Embracing the transition to a civilian profession

One attribute of a cohesive workforce is all members of the team are motivated towards a common goal. It would seem logical that if one member lost his motivation and wanted to leave, the Navy would let him or her go instead of keeping them in against their will. These folks often develop "bad attitudes" that become destructive to the overall workplace morale and productivity. Thus, the 21st Century Navy will likely not try to keep people in who want to leave the service, but rather address the reason they are leaving.

Some sailors resort to breaking the rules to get out of the Navy. Among the rules are homosexuality, unauthorized absences, and illicit drug usage. A study was recently convened to examine illicit drug use in the Navy and its use as a method to end commitments. One likely outcome of the study will be to increase the penalty for drug use to a Bad Conduct Discharge (BCD).²¹⁴ Opponents suggest that instead, the Navy should hold the ex-sailor financially accountable for the education and training he

received, however let him transition to civilian life without significantly damaging his ability to be a productive member of society. The financial impact might likely have more of a preventative influence on would-be early outs, yet wouldn't be designed to permanently scar an ex-sailor's life simply because the Navy was not the right place for him or her.

As every sailor leaves the Navy and in a way becomes the Navy's ambassador to society, it is wise to let each one leave with positive memories of the service. Subsequently, it is possible that some may actually return to the organization after trying civilian employment. Perhaps the 21st Navy should evaluate sailor exit methods--attrition, end of enlistment, resignation, and retirement--and engineer each as if the processes were training future, not to mention free, recruiters. A forward thinking organization would continue to get the most out of its employees, long after they leave the Navy.

20-Year Retirement Alternatives

The current retirement system is another area that could use an overhaul with its strong incentives for a rigid 20-year career. A CNA report indicates that significant rigidity exists in the all-or-nothing vesting provision so that force management is inhibited and more mid-career personnel are retained than are required. Additional options need to be considered that allow the services greater flexibility. Such options could include service member contributory plans, matching or non-matching programs, portable retirement accounts, and so on. There are considerable cost implications for these various options as well as strong assumptions being made concerning their effect on individual behavior.²¹⁵

Although figures 20 and 21 suggest the retirement benefit is an attractive motivator for some, the fact remains that well over 90% of enlisted are never retirement eligible. As military retirement doesn't apply to the majority of the workforce, the 21st Century Navy needs to offer options for good sailors to stay and work as long as they wish and still contribute to their retirement years. As a result, the current lack of a viable retirement vehicle for all sailors (not just the ones that stay 20 years) encourages all to leave as soon as possible to start preparing for their senior years. Even with the new Thrift Saving Plan,

without employer matching, it is little more than another IRA type device. The 21st Century Navy will likely need to match the Thrift Savings Plan contributions to properly motivate its sailors.

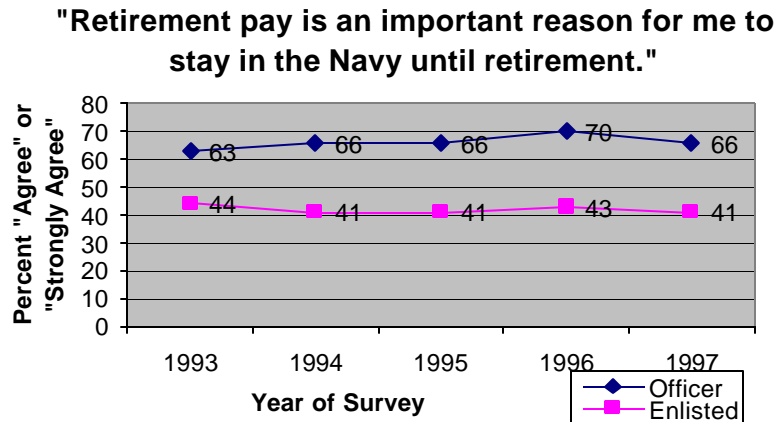


Figure 20
Retirement Motivation, Navy-Wide Personnel Survey (1990-1997)²¹⁶

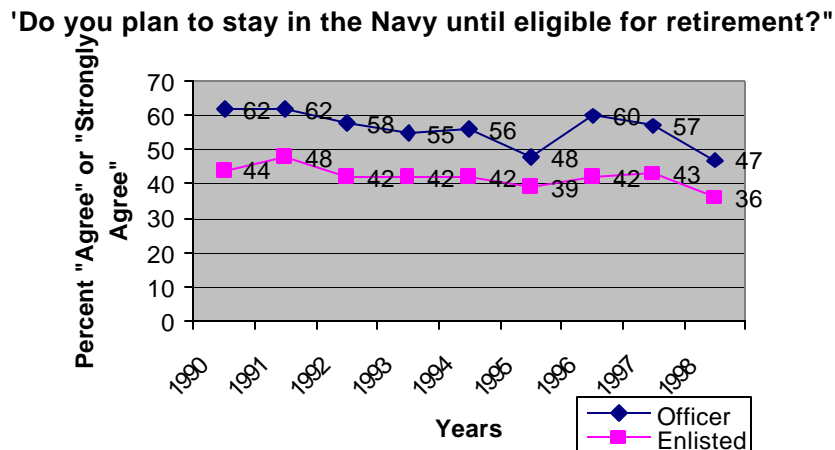


Figure 21
Retirement Intentions, Navy-Wide Personnel Survey (1990-1998)²¹⁷

There is one final aspect of the current retirement plan that is worthy of analysis. Currently at the 20-year point, a sailor can retire and receive half of his base pay without working. Thus, by not retiring and assuming the increased responsibilities of seniority, he or she is essentially working for half pay. This is contrary to the civilian practice of increasing senior management compensation to retain valuable expertise as long as required.

LN2 Michael Campanelli offers his opinion as a hard working sailor, "One of the most highly valued benefits of performing 20 years on active duty is the knowledge that one will receive half pay for life. This type of certainty is almost wholly unavailable in the private sector, which, seeking to cut costs, has largely replaced defined benefit retirement plans with defined contributions plans."²¹⁸ As an important motivation tool for some, the 21st Century Navy should continue to analyze and adjust the retirement benefit in accordance with its human resource vision.

Civilian Co-ops

A final area to explore is built around the concept that not only does every sailor leave the Navy, but many chose to leave for civilian jobs that promise a better motivational package to the individual. Whether the better motivators include larger salaries, more time at home, better health benefits, or better chance for promotion is irrelevant. An obvious option is to embrace the competition and arrange for a seamless transition for the sailor to the new civilian occupation. The human resource challenge, then, is to manipulate the arrangement to benefit the Navy.

One possible benefit to the Navy might be to get more sea duty out of the individual before he leaves the service. This might be accomplished by a cooperative arrangement with a company, to hire individuals straight out of the service. To begin the seamless transition, the sailor might work for three years for a civilian business in lieu of a shore duty, before embarking on his or her second and final sea duty. The obvious question is, "Why would any sailor opt to go back to sea after getting comfortable in his or her new occupation?" The answer lies in a bit of creativity for each targeted rating.

It is likely, the Navy would first want to experiment with sailor ratings, like IT, which might be increasingly difficult to retain due to civilian demand for the talent. Another possible candidate for a co-op arrangement is the pilot field. Appendix C explores a possible pilot co-op with the civilian airline industry that might benefit Navy pilots, the airlines, and most importantly, the Navy itself. Although far from a complete analysis, it suggests one of many options that might be applied to other hard-to-retain Navy specialties.

Organizational Alignment

"Generally, management of many is the same as management of few. It is a matter of organization."

- Sun Tzu²¹⁹

In the 21st century, there must be a leader in every organization, and they must have an organizational structure in place. The structure depends on the nature of the enterprise; one size does not fit all. Each organization must find its own form rather than grab one off the rack.²²⁰

Leaders are organizational architects. Just as architects need blueprints for building houses, leaders need blueprints for designing organizations, fitting the pieces of the organization together to influence the behavior of people toward the accomplishment of the organization's objectives. A series of studies over three decades led to the following conclusions: 1) There is no single best way to organize, 2) The ideal organization is one that is aligned with or fits its environment, 3) There are seven key elements of an organization that are critical in understanding an organization's effectiveness: strategy, structure, systems, staffing, skills, style and shared values, and 4) To be effective, an organization must have a high degree of internal alignment among these seven elements. In short, an organization requires alignment.²²¹

Leaders manage their human resources to obtain organizational performance by channeling individual potential into achievement. Research demonstrates that fundamental strategic choices about rewarding, organizing, and managing people affect organizational performance.

Organizations often decide to make piecemeal changes without fully understanding the long-term implications or whether the rest of the human resource management system will enhance or inhibit the effectiveness of the change. As a result, decisions made on a case-by-case basis, often produce unintended consequences or fail to fully achieve desired ends. The most effective organizations over the long term devote time and attention to resolving tactical issues and questions within the broader strategic context of the organization.

People are the largest and single most valuable asset of the Navy. Today, leaders are developing doctrine to support a vision of a world-class Navy in the face of an extremely dynamic and uncertain

environment. Yet, the Navy distinguishes itself by not employing a strategic perspective in the design of its human resource management systems.²²²

Human Resource Alignment

The 8th Quadrennial Review of Military Compensation concluded that no structured process exists today to enable the uniformed services to manage human resources strategically--to align the elements of the compensation system with organizational objectives and to design policies and practices to motivate behaviors that enhance organizational performance. The largest share of the uniformed services' budget is for people's salaries. Yet no tool exists that parallels the strategic process assisting leaders in the development and allocation of other resources such as weapon systems. This deficiency is a drain on resources, prevents the services from reaping the full potential of their people, and tends to go unnoticed for two reasons. The current system has produced the highest quality force ever, so leaders do not think about opportunities lost. Secondly, it is difficult to place a tangible (money) value on human resource efficiency and initiatives.²²³

Human Resource Vision

"We are in the people business...teach them and help them and care about them. Give them a fair shake. Give them skills; help them succeed; make winners out of them. - Get good people and expect them to perform. Terminate them quickly and fairly if you make the wrong choice. - work hard, but have fun."

- J. Willard Marriott, Jr., 1984²²⁴

While some believe a bit of Marriot's insight should be in a future Navy vision, others relate a future HR vision to mission accomplishment. The Department of the Navy and its component organizations must remain mission driven, but decisions about resources and programs should be based primarily on human resource considerations rather than on the availability and operating requirements of platforms and military equipment. This approach will entail a fundamental change in institutional values,

and will require the Department to align all its various human resource programs while allowing component organizations the flexibility to adapt to specific mission requirements.²²⁵

An aspect of this fundamental change might include upgrading the head of Navy's personnel system from three to four stars and increase his or her tour length to eight years thereby promoting a longer-term focus. This would closely parallel the current nuclear power model, which is considered a very effective method for personnel management.

Training and Education Vision

It has been said that one by-product of the information revolution is continuing education. As more and more knowledge workers work with their heads rather than their hands, education will have to be continuous and delivered in new formats. It will be off campus, in homes, cars, commuter trains and anywhere small groups can meet.²²⁶ Training and education will form a central part of most 21st Century organizations.

There are generally three types of training and education in today's Navy: unit training, individual job related training, and civilian academic education. While the first two are required for warfighting readiness, the third is primarily a benefit to offer as part of an overall motivation package. Table 5 helps to quantify the fiscal motivation for more education.

Although training and traditional human resource functions are greatly intermeshed, the Chief of Naval Operations is generally the first common link between the two. As a result, training and education programs are often at cross-purposes with other human resource efforts. For example, the Navy offers to contribute money for college tuition when sailors leave the service, which might entice them to leave the service contrary to current retention efforts. The 21st Century Navy will need to move training and education into the overall personnel management function for aligned efficiency.

Unemployment rate in 1998 (Percent)	Education attained	Median earnings in 1997 (dollars)
1.3	Professional degree	72,700
1.4	Doctorate	62,400
1.6	Master's degree	50,000
1.9	Bachelor's degree	40,100
2.5	Associate degree	31,700
3.2	Some college, no degree	30,400
4.0	High-school graduate	26,000
7.1	Less than a high-school diploma	19,700

Table 5
Education Pays
Unemployment and earnings for year-round, full-time workers age 25 and over, by educational attainment²²⁷

Surveys

In order for leadership to manipulate different sailor motivational factors, they need to know how each will impact the workforce. The three best sources of feedback from troops concerning motivating factors are from unit leaders, surveys, and detailers. The most standardized and objective of these three are personnel surveys.

Many observers believe that personnel are over surveyed and that the surveys may actually harm retention. They suspect that sailors are bombarded with different surveys that all seem to ask similar questions but never lead to change. Furthermore, organizations are not likely to account for the impact that their surveys may have on sailors' willingness to participate in other surveys. Therefore, coordination of survey efforts is crucial.²²⁸

Table 6 shows the response rates of all Navy surveys conducted in the last 16 years. Maintaining high response rates on surveys is critical for drawing accurate conclusions about the member population. If the response rate is too low and the survey results lose validity, the survey fails to inform policy makers on how to address such issues as retention, or worse, misinforms policy makers about the opinions of sailors. Experts contend many Navy surveys don't have a statistically significant response rate.²²⁹

Survey	Year	Response Rate
DMDC Survey of Active Duty	1985	77% Officer, 72% Enlisted
	1992	72% Officer, 62% Enlisted
	1999	56% Overall (initial assessment)
Navy-Wide Personnel Survey	1990	52%
	1994	47%
	1998	39%
Navy Quality of Life Domain Survey	1997	38%
	1999	34%
	1989	60%
Navy Equal Opportunity/Sexual Harassment Survey	1997	45%

Table 6
Navy Personnel Survey Response Rates²³⁰

Some survey researchers believe that there is a connection between survey response rates and dissemination of results. They believe that response rates are falling because survey results are poorly disseminated, and respondents never know if their responses alter policy. There may be general discouragement among Sailors about surveys as a method for effecting change.²³¹

The Navy is addressing current deficiencies in its surveying practices with the new ARGUS surveying system. The goal of ARGUS is to make the survey mandatory for all Sailors undergoing transition. This feature is designed to overcome a key drawback to the Navy Retention/Separation Questionnaire that is over-represented by those who are least happy with Navy life. It is a web-based system to make response, data collection, database management, and analysis of results as easy and fast as possible. It will also allow commanders access to results from his/her command. A final important difference in the ARGUS system is the planned link of responses to personnel files via a respondent's social security number. This will greatly aid the analysis of opinions and actual behaviors.²³²

21st Century Leadership

Many recognize traditional compensation alone does not address the fundamental difficulty the Navy is experiencing with motivating its sailors. They note that 20 years ago the Navy gave out bonuses of up to \$15,000 to keep a nuclear-trained sailor for a few extra years, and now the Navy offers up to \$45,000 to keep a similar sailor from leaving. Before long, the new ceiling on the selective reenlistment

bonus program (SRB) may not be enough to keep our sailors. How high must we go to keep the most highly trained personnel?²³³

Master Chief Machinist's Mate Mark Butler contends that more money is not the answer when it comes to retention; the real answer is leadership. He believes the failure to retain the best sailors is a failure on the Navy's part to provide for their needs. Specifically, esteem and self-actualization are by far the most important in ensuring high morale among sailors. Among esteem needs are responsibility, self-respect, recognition, and a sense of accomplishment. Self-actualization needs include self-expression, creativity, independence, and reaching one's full potential. Leadership must satisfy these needs to maximize sailor productivity.²³⁴

"What is clear is that the increasingly fast-moving and competitive environment we will face in the twenty-first century demands more leadership from more people to make enterprises prosper. Without that leadership, organizations stagnate, lose their way, and eventually suffer the consequences."

- John Kotter²³⁵

Literature suggests that leadership may be the single most important topic to address towards the effective motivation of 21st Century sailors. As an added bonus, leadership initiatives are generally free. While John Kotter offers an academic perspective on the importance of leadership in an organization, there may be equal value in looking at traditional military leadership examples, like the following:

Operations in the Arizona Valley, within the depths of Vietnam's An Hoa Basin, were among the most combat intensive any Marine unit experienced in 1969. The Viet Cong seemed to saturate the entire valley, and every day was a struggle for survival for the Marines of the Fifth Marine Regiment. A courageous, competent first lieutenant and one of his best squad leaders were tasked with clearing a series of spider holes while on a patrol. Suddenly, and most unexpectedly, a Viet Cong soldier appeared from a hole with a grin on his face. The lieutenant instantly killed him with his .45 revolver, but the soldier released a live grenade before he collapsed, and it rolled perilously close to the young squad leader.

Instinctively, the lieutenant pushed his fellow Marine to the ground and covered his comrade with his own body. "He saved my life," this lance corporal recalled more than 20 years later. "He just totally shielded me." First Lieutenant James H. Webb sustained wounds of such severity that he eventually was discharged from the Marine Corps. He earned the Navy Cross for the valor he exhibited in saving his fellow Marine, but never again would he lead Marines in the field.²³⁶

Leadership might best be addressed as a form of art. Just as it's often difficult to distinguish between a good painting and a bad one, it's even more challenging to quantify techniques and traits of the

best artists. Although a good artist cannot be mechanically developed, there are in fact art classes to provide a basic foundation on which to build. Similarly, organizations should provide regular leadership forums to give leaders required basic tools and to align their efforts towards a common vision.

Perhaps as good art is often identified by expert opinion, leadership insight might best be found in opinions of some of the most successful. H. Ross Perot, Founder and Chairman of the Perot Group, strikes a compromise between sensitivity and mission with the Perot Group Credo, "Engender mutual trust and respect; listen to the people who do the work; hold team members accountable with the clear understanding that ethical standards must never be compromised."²³⁷

Robert Crandall, Chairman and President of American Airlines, epitomizes fore of the "touchy feely" aspect of future leadership, "I think the ideal leader for the 21st Century will be one who creates an environment that encourages everyone in the organization to stretch their capabilities and achieve a shared vision, who gives people the confidence to run farther and faster than they ever have before, and who establishes the conditions for people to be more productive, more innovative, more creative and feel more in charge of their own lives than they ever dreamed possible."²³⁸

Leadership Versus Management

One of the many debates among the experts concerns the differences between leadership and management. While most recognize there is a difference between the two, they cannot agree on the specifics. For example John Kotter in his article, "What Leaders Really Do," contends that leadership and management are two distinctive and complementary systems of action. Each has its own function and characteristic activities. Most U.S. corporations today are over managed and under led. They need to develop their capacity to exercise leadership. Companies should also remember that strong leadership with weak management is no better, and is sometimes actually worse than the reverse. The real challenge is to combine strong leadership and strong management and use each to balance the other.²³⁹

Kotter observes that not everyone can be good at both leading and managing. Some people have the capacity to become excellent managers but not strong leaders. Others have great leadership potential but, for a variety of reasons, have great difficulty becoming strong managers. Smart companies value both kinds of people and work hard to make them a part of the team.²⁴⁰

Management is about coping with complexity. Its practices and procedures are largely a response to one of the most significant developments of the twentieth century: the emergence of large organizations. Without good management, complex enterprises tend to become chaotic in ways that threaten their very existence.²⁴¹

Leadership, by contrast, is about coping with change. Kotter believes part of the reason it has become so important in recent years is that the workforce has become more competitive and more volatile. The net result is that doing what was done yesterday, or doing it 5% better, is no longer a formula for success. Major changes are more necessary for survival and to compete effectively in this new environment. More change demands additional leadership. The different functions - coping with complexity and coping with change- shape the characteristic activities of management and leadership.²⁴²

Margaret E. Mahoney, President of the Commonwealth Fund, makes a slightly different observation, "I think that the distinction between managers and leaders is extremely important because a good manager must be concerned with people. He or she must have the right instincts for how one puts together an institution that will work. But a leader must have the visionary capacity to look ahead, assess how the world is going to be, and take the institution toward that vision. Leadership also encompasses the capacity to generate within others the desire to be a partner or a team member and to work together with others."²⁴³

Marcus Buckingham, in his book First Break All the Rules, takes yet a third approach. He believes good managers understand that management is not about direct control, but about remote control. That is, they realize that trying to control every aspect of someone's performance is futile. The object must be to allow people enough room to accomplish the goals set by the organization. The dilemma for managers is that they know they can't change much about an individual and that they must focus people

on performance. The solution is both elegant and efficient. Define the outcome and let each person find his or her own way to it. Each person can reach the outcome by the route most comfortable for him or her, and each worker takes responsibility for the solution.²⁴⁴

Buckingham contends that managers must avoid the temptation to create perfect people. Imagine a well-intentioned expert wanting to help workers rise above their imperfections. He identified the "one best way" to perform a function. And off to training they go because the manager believes that the "one best way" can be taught. Once his people are trained, he reasons, all that is left is to monitor that everyone is following the plan. Managers must not attempt to make perfect people. What looks like a miracle cure is actually a disease that diminishes and demeans people, and weakens the organization.²⁴⁵

Extensive research comparing great managers, "The ones you would dearly love to clone," to mediocre managers showed that the great managers break all the rules. They ignore the conventional wisdom that says management's job is to identify worker weaknesses and devise a plan to react and overcome those weaknesses. Instead, they operate on the assumption that people don't and probably can't change many traits they carry. Good managers recognize the futility in demanding change and concentrate instead on developing employee strengths.²⁴⁶

Thus while Kotter believes management controls people by pushing them in the right direction, leadership motivates them by satisfying basic human needs. Buckingham continues and states that leadership and management must be integrated--one can't exist without the other. Both concepts are applicable to the Navy. The 21st Century Navy should address the debate and decide how to best tailor enlisted and officer leadership training of the future.

Organizational Challenges

In the past, many corporations designed their organizational structure around the military hierarchical model. This model was very effective during crisis situations, and also provided an appropriate leadership style for middle 20th Century society. It appears that this top-down approach may no longer be adequate to motivate the 21st Century warrior or society in general.

Lynne McFarland sees a need for more flexible organizations and new ways of leading to maximize the contributions of all people. Most leaders agree that rigid hierarchy is dying because it runs on position power instead of relationship power. Robert Reich, Secretary of Labor and former Professor at John F. Kennedy School of Government, Harvard University, observes, "Leaders are becoming divorced from formal authority because organizations are becoming decentralized webs instead of hierarchical entities."²⁴⁷

One reason for this major shift is the change in the way people are willing to be managed and led. Today's employees want to have a voice and make a difference--they no longer want to follow blindly what the boss directs them to do. People are less impressed and intimidated by leaders just because those leaders may have built-in authority and position. People know and believe the worthiness of what they are doing is the basis of their contribution.²⁴⁸

The explosion and availability of information is the other major reason for this dramatic change. People communicate more, see more, hear more, and know more--faster than ever before in history. "So many people have access to so much information that it levels out our leadership," says Marjorie Blanchard, President of Blanchard Training & Development, Inc.²⁴⁹

In short, Effectiveness in leadership can no longer be centered in positions within a rigid hierarchical structure, but must be centered in interdependent relationships in which leadership and power are shared broadly. Today's best leaders believe that if you want to lead people, earn and win their trust, so they want to support you.²⁵⁰

Admiral Reason suggests that the Navy might still have something to offer today's organizational discussion. In the complex and rapidly changing world of a carrier flight deck during flight operations, very complex procedures must be executed quickly and perfectly, or catastrophe results. Information for decision-making comes in fast flowing floods. Scores of decisions and actions must occur nearly

simultaneously and are often followed by torrents of more information and equally urgent decisions that likewise allow no margin for uncorrected error.²⁵¹ The flight deck teaches that the function of the command levels is not to give ad hoc direction to the team, but to define its tasks and to give the team the training, tools, information, and support needed to accomplish its tasks. In addition, the Navy must provide the following to each sailor, officer, and enlisted: a reasonable scope of responsibility and authority, training to do assigned tasks exceeding well, accurate information needed to do the tasks, and recognition of experts' authority and importance.²⁵²

In fact, before civilian organizations jump ship and completely reinvent an organizational structure, they might benefit by a quick analysis of the military hierarchy. Figure 22 depicts the perceived view of today's military hierarchical structure. In contrast, figure 23 is a centralized view of the widely accepted ideal 21st Century organization. Initially, the two look completely different, where in fact they are functionally identical. Instead of being vertically stacked in figure 22, all the same nodes and paths are centrally spread out with the same functionality. The real benefits of figure 23 are the two way and lateral communications paths that are generally associated with a centralized structure. Thus, the old military hierarchy can be modernized simply by adopting a two way flow of information as well as opening up lateral paths to share information between all levels and all departments (figure 24).

Today's Perceived Military Hierarchical Structure

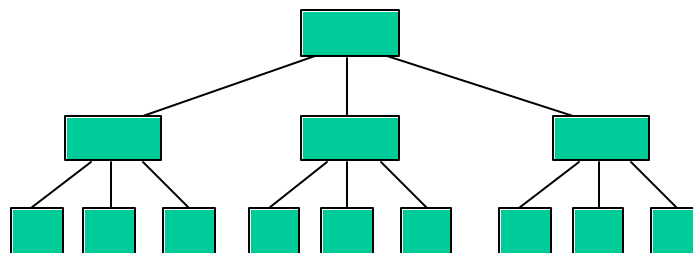


Figure 22
Today's Perceived Military Hierarchical Structure

21st Century Organization

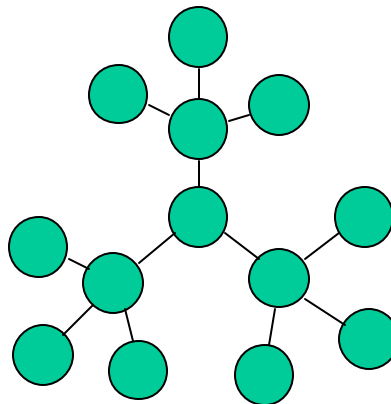


Figure 23
21st Century Organization

21st Century Navy Organization

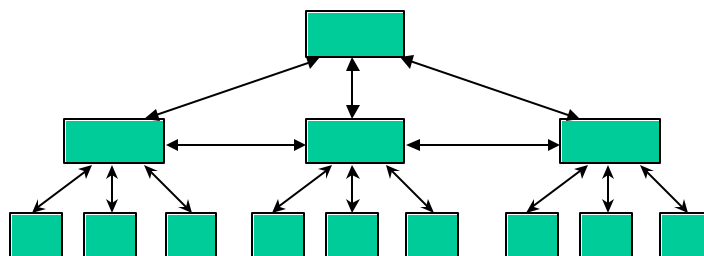


Figure 24
21st Century Navy Organization

While business literature and Navy retention challenges suggest the 21st Century Navy needs to update its organizational structure, the U.S. Navy is still the best in the world and still does many things well. Thus, any leadership initiatives should be tempered with an evolutionary approach to prevent "Throwing the baby out with the bath water."

Growing Leaders

One of the most challenging human resource tasks is for an organization to grow its future leaders. Although the Navy may be lacking in formal leadership training, it excels at providing on the job opportunities for its young leaders.

John Kotter believes leadership challenges early in a career are essential to the growing process. Leaders almost always have had opportunities during their twenties and thirties to actually try to lead, to take a risk, and to learn from both triumphs and failures. Such learning seems essential in developing a wide range of leadership skills and perspectives. It also teaches people something about both the difficulty of leadership and its potential for change.²⁵³

Corporations that do a better-than-average job of developing leaders put an emphasis on creating challenging opportunities for relatively young employees. In many businesses, decentralization is the key. By definition, it pushes responsibility lower in an organization and in the process creates more challenging jobs at lower levels.²⁵⁴

There are downfalls to the on-the-job leadership training that Kotter advocates and the Navy practices. They come in the form of the inevitable trial-by-error mistakes and the resulting negative impact on employee morale. Evidence suggests that the damage from a poor leadership is more severe as the leader becomes more senior.

A final challenge to growing leaders is the fact that there are a variety of effective leadership styles that are all developed in a different manner. To illustrate this point, Martin Puris contrasts two equally effective leaders who turned their companies around in his book, Comeback.

Robert Louis-Dreyfus took the reins at Adidas when the sportswear firm was barely viable. Market share had almost evaporated and creditors had all but given up on the idea of ever recouping their losses. Louis-Dreyfus got Adidas off the bench and into the game again. Under his tutelage, sales soared and market share blossomed. Four years from the brink of disaster, the company became bigger and better than ever with the \$1.4 billion purchase of Salomon S.A.²⁵⁵

Gordon Bethune performed similar magic as CEO of Continental Airlines. He took a twice-bankrupt company and showed it how to win customers to make money. In fact, Continental boasted thirty-seven straight months of profits between 1995 and 1998.²⁵⁶

On the surface, Louis-Dreyfus and Bethune seem to share little in common. Louis-Dreyfus comes from old money. Bethune is a self-made man. Louis-Dreyfus honed his skills in different

industries. Bethune trained in the navy and a single industry, the airline industry. Both men do, however, share the ability to lead.²⁵⁷

The challenge to the 21st Century Navy is to analyze the leadership training continuum for its ability to provide basic tools and minimize some of the pain inherent in the on-the-job training method.

Mentoring/Reverse Mentoring

The concept of mentoring has a rich tradition. In The Odyssey, Homer describes how Ulysses, prior to fighting the Trojan War, entrusted his son's well-being and education to the care of a wise, older man named Mentor. In this role, Mentor guided his young charge to an understanding of human nature, honesty, wisdom, and commitment to serving others.²⁵⁸

In a past survey, junior officers in the surface warfare community ranked access to mentoring as one of the strongest factors influencing professional development and retention. One of the few assessments of the effects of mentoring in the Navy was a study of Medical Service Corps officers, which found that those who were mentored by a superior had higher job satisfaction ratings and reported intent to remain on active duty.²⁵⁹

Research shows that a mentoring relationship works best when it evolves over time, in an informal fashion, through a shared interest in professional development. Effective mentoring relationships are those in which the communications styles of the mentor and protégé match one another.²⁶⁰

Two way mentoring can foster the flow of IT technology uphill, and leadership skills downhill. No change program can succeed simply by imposing a mechanistic mentoring program from above on employees who are struggling with widespread transformation. Most organizations will need to integrate young people for change. In today's information based economy, knowledge may be king, but it's the sharing that takes place between young and old that is essential.²⁶¹

At General Electric, if an executive closes himself off from learning new things, he is putting his career in jeopardy- and the company's success at risk. The key to success is that no matter what level individuals find themselves in the organization, they can accept change.²⁶²

Some believe that progress occurs when old men die and young men take over. Indeed, this may be the case in the Navy with the natural flow of people in and out of jobs. Others argue that a more responsive change can occur when people are open to learning from mentors, regardless of their age. An essential characteristic of good mentoring is openness, by both parties, to the complexities of the other person's experiences.

Concerning IT technology, it is likely in the future that the younger generation will mentor the older Navy generation rather than the other way around. Reverse mentoring was tried at Armor Coat Insurance, the Providence, Rhode Island based property and casualty insurance company. All salespeople were strongly encouraged to choose a young mentor who could teach them how to store and call up information from Armor Coat's new on-line databases and how to surf the Web. The thought was, if the customer-focused salespeople understood the Web more, they could help Armor Coat use the Internet to boost profits and improve service. Unfortunately, that company found that teaching old dogs new tricks doesn't always work when complicated with an instructor half the student's age.²⁶³

Reverse mentoring, to work effectively, should be a non-threatening, supportive, and educational experience for both parties. Therefore, the selection of a mentor is as critical as the choice of a coach in any professional sport; it requires careful thought and consideration. Reverse mentoring can solidify collaboration among functional groups, but it cannot be the only tool that enforces such teamwork or the sole catalyst for change. Rather, effective reverse mentoring is a by-product of good communication that already exists between functional groups. Even the best mentor-protégé relationships have their limits.²⁶⁴

Whether a typical mentoring or reverse mentoring relationship, the most effective are those of a more voluntary give and take arrangement. As another free tool to promote information flow and teambuilding, the 21st Century Navy should foster these interactions, yet fall short of mandating them.

Chapter 6: Recommendations

"I was to learn later in life that we tend to meet any new situation by reorganizing: and a wonderful method it can be for creating the illusion of progress while producing confusion, inefficiency, and demoralization."

- Petronius Arbiter, 210 B.C.²⁶⁵

This profound insight provided over 2200 years ago suggests that change for the sake of change is often more detrimental than maintaining the status quo. To effectively transform today's Navy, first it must be determined that the world's best Navy needs to change. If 70-85% of sailors like the work they do in the Navy, as figure 25 suggests, then why do 86% of them leave as soon as they can and why is warfighting readiness less than optimal? This paper contends that the Navy no longer provides adequate satisfaction or motivation to a sufficient number of its sailors. Even if the current 14% efficient human resource model is desired, the warfighting readiness of those transient sailors could likely be improved.

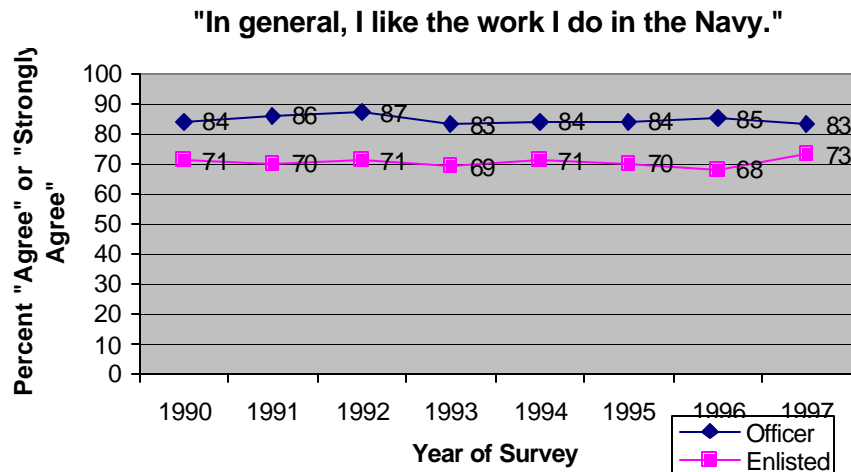


Figure 25
Navy Satisfaction, Navy-Wide Personnel Survey 1990-1997²⁶⁶

Appendix D offers insight on organizational change theory as it might be applied to the Navy. "To be effective, 21st Century leaders must shift their own style of management, reshape major aspects of their culture, rethink their ways of operating, and essentially reinvent their organizations."²⁶⁷ Lynne

McFarland summed up the 21st Century Navy's challenge if it is to motivate its sailors toward optimal readiness. In accordance with Appendix D, remaining tasks begin with the first step down the long road of progress.

The following is Lieutenant Commander Martins' "Five Steps towards a motivated 21st Century Navy." To harness the intellectual capital of 21st Century Sailors, the Navy must simultaneously address each step as part of a coordinated holistic human resource effort.

Step 1: Revisit the 21st Century Navy Vision

As discussed, today's Navy vision found in Appendix A should be evaluated for its potential to provide a concise alignment of the large organization and its diverse tasks towards a common goal. It should not be another phrase to merely frame and hang on each work center's wall, but rather should be a concept to align an improved Navy organization, enhance the current human resource system, and refresh the leadership process. Specifics might address:

- The manner in which the Navy will provide National Security in a 21st Century FORCEnet environment. The Navy won't likely continue to cruise the same way it has for last 50 years. One proposal, appendix B, is to deploy in smaller more efficient units of two and three platforms that would allow for decreased time away from home, a greater variety of ports, and an overall increased quality of sea duty. The desired result would be scalable and effective warfighting packages that tailor force to individual political situations.
- The manner in which the Navy will manage sailors. The future Navy won't likely follow the current "up or out" 14% efficient model that it used for over 50 years. Twenty-first Century challenges are demanding a move away from the high volume conscription based model that treats sailors as if they were expendable.
- Instilling a goal for continual strategic change. The Navy likely won't be able to evolve in the current inefficient piecemeal fashion. The undying quest for improvement is already alive in

today's Navy. Unfortunately, current individual change efforts typically aren't aligned towards a common tangible vision.

- Expansion of the current vision's scope to elevate the Navy's purpose to a higher ethical plateau.

The following introduces a possible area in which to benefit society, improve public relations, and elevate the Navy's stature above the other services:

Owen "Brad" Butler, Former Chairman of The Committee for Economic Development, notes that every day of the school year in the United States we take at least 4,000 casualties among our youth. These are young Americans who leave our education system without being educated. I'm counting only the ones who drop out. Add to that an unknown number who finish 12 years of schooling and get a piece of paper but are barely literate enough to read it. These casualties have dropped out not only of school but of citizenship, of a productive career, of the ability to be intelligently self-governing. Four thousand young Americans today drop out into despair, unemployment, teenage pregnancy, drug abuse, crime and welfare. A few will recover to lead full, productive lives. But most of them will be disabled all their lives, and many will die of that "wound of ignorance."²⁶⁸

The Navy might expand its primary mission of providing national security by supporting community service through employment and education. A vision should be adopted to help otherwise non-productive members of society by transforming them into productive individuals. This should be a goal not only because it's the right thing to do, but also to profit the organization in terms of increased public support and funding, an improved organizational image for recruiting, a more robust culture of values, and an overall motivated workforce that is excited at the opportunity to excel.²⁶⁹ The Navy has a plethora of blue-collar jobs waiting to be filled by a huge population who would love to fill them. Should the Navy pursue this concept, rigorous analysis and planning would be needed to ensure that the failures of similar efforts in the 1970s were not repeated.

Step 2: Improve Sailor Motivators

Despite a large variety of incentives available for warrior motivation, many could, and should be improved. Prior to action, however, a full analysis of second and third order effects will be needed to ensure there are no unintended consequences of proposed improvements. A suitable organization to provide this analysis might be the evolving Center for Career Development (CCD). The scope of improvements should address the following:

- Compensation, specifically compensation for sea duty which is becoming increasingly less attractive to the 21st Century sailor. Creative models might include options of paying sailors much more for sea duty, at an overall savings to the Navy. In addition, military base pay reforms should be pursued to reward performance (promotions) over longevity. Finally, the Navy might experiment with team oriented bonuses associated with a unit's safety rate, warfighting readiness, or retention.
- Free time. As a sailor's time is often considered a free commodity to Navy leadership, more leisure time can be a powerful source of motivation. In the past, the Navy has under-funded fleet-manning requirements which although having produced intended savings, has also caused many good overworked sailors to leave. The 21st Century Navy should evaluate the manpower requirements determination process, and fully fund fleet manning at appropriate levels.
- Sailor interaction with the Navy. In addition to the chain of command, another significant line of communication between sailors and the Navy organization is the detailing process. Detailers should be empowered to create and compose unique motivational packages suitable to individual sailors. Hard to fill assignments should be appropriately enhanced to attract sailors. Desirable sailors should not be forced out of the Navy simply because they don't want to move or take a job. The days of losing the world's best fighter pilots or radar technicians simply because they don't want to move to Japan, Diego Garcia, or Guam should be over.
- Decreased PCS moves. Homesteading increases family stability, increases sailor community involvement, saves money, and reduces dissatisfaction associated with frequent PCS moves. In light of approximately 210,000 costly moves per year, leadership should begin to make homesteading a culturally viable option for sailors.
- Better defined career path. Many believe the Navy values its warrior's services only until the completion of his or her current tour, at which time he or she will be re-evaluated for follow-on assignments. What Navy leadership doesn't realize is that individuals are simultaneously

performing their own evaluation on the Navy's lack of commitment and are responding with their own decisions to leave for a more stable and rewarding environment. The 21st Century Navy may want to commit to its people and their families by offering the option of defining careers as much as five years into the future.

- Improved family support. There are many scenarios in today's society where a child's school or a spouse's employment might lead to a sailor's decision to move without the family. Currently, there are few Navy policies that recognize or compensate sailors for making this incredible sacrifice for the organization. A future Navy human resource vision should address the geobachelor reality and attempt to alleviate some of the associated financial, housing, and travel burdens.
- Unit Cohesion. The readiness benefits of keeping a crew together during an entire Integrated Deployment Training Cycle and subsequent deployment are uncontested. Currently the Navy workforce is being managed as 369,563 individuals, not as a set of warfighting teams. Leadership should mandate that no personnel will be transferred into or out of a unit for a six month period, beginning two months before a unit deploys and ending four months into the deployment. This window can be expanded as a system matures to meet the new requirement.
- Embracing the transition to a civilian profession. As every sailor leaves the Navy and in a way becomes the Navy's ambassador to society, it is wise to let each one leave with positive memories of the service. Subsequently, it is possible that some may actually return to the organization after trying civilian employment. The 21st Navy might evaluate sailor exit methods--attrition, end of enlistment, resignation, and retirement--and engineer each as if the processes were training future, not to mention, free recruiters. Two possible initiatives to increase exiting sailors' satisfaction might include matching 401K plans and co-ops with civilian industry.

Step 3: Refresh the Leadership Continuum

"Many brilliant people conceive wonderful ideas and then don't follow through. They believe ideas will move mountains. In reality, of course, it is bulldozers that move mountains. Don't stop when the planning is over. That's when the work should begin."²⁷⁰ Peter Drucker's observation supports the need for leadership alignment to carryout a common vision.

Many feel that Navy leadership has to adopt the same attributes associated with network centric warfare; a common architecture, streamlining conductivity between all nodes of the Navy organization, and unparalleled speed of information exchange.

Thus, the leadership continuum should be evaluated for its ability to produce a standardized product (a common architecture) capable of managing the \$91 billion a year organization in an efficient manner. "It is not too bizarre a prediction to make that one day the kind of courses now offered at the Harvard Business School may replace the curricula that the military academies are furnishing the future generals and admirals of the U.S. Armed Forces."²⁷¹ While Frederick Herzberg's prediction, made in his 1966 book, failed to materialize, many still see this as a deficiency in current Navy leadership training. The Navy is one of the few large global organizations that don't encourage senior management to obtain MBAs.

A final Naval leadership deficiency worthy of mention is the apparent inability to support the party line. Leadership in this discussion refers to anyone wearing khakis including senior enlisted, junior officers, as well as flag officers. While it is not uncommon to find a Navy junior officer openly complaining about Navy life, it is unheard of to find a Marine Gunny or First Lieutenant "bad mouthing" the Corps. While constructive criticism is required in an innovative organization, this needs to occur in the proper forums. The 21st Century Navy might turn to its Marine Corps brothers, who tend to lead very well, to evaluate Navy leadership training. Specific actions might include:

- Identifying a leadership focal point, such as the Naval Academy, to own and standardize the existing Navy leadership continuum across all warfare communities.

- Incorporate applicable aspects of typical MBA curriculums into Navy leadership training. This might include identifying an avenue for Navy leaders to receive MBAs from reputable civilian organizations. While the Naval Post Graduate School is taking long overdue steps towards offering an accredited MBA option, many would argue that the primary value of a reputable civilian MBA program is the interaction with the best and brightest international leaders across society.
- Advertise sailor motivators. The Navy arguably has one of the greatest variety of competitive incentives available for warrior motivation. Unfortunately, they are not advertised well to its sailors. Leaders should be educated on all people programs and taught to emphasize applicable ones to meet individual sailor needs.
- More efficient communications. Harness the internet to identify a streamlined method to achieve quicker connectivity between the CNO and unit work center supervisors.

Step 4: Enhance the Current Human Resource Strategic Vision

Many people argue that today's Navy human resource system lacks a strategic focus due to the daily "war for people," a struggle exacerbated by the people factory that processes approximately 110,000 personnel entries and exits each year.

This strategic deficiency was recognized about three years ago and the Naval Human Resources Board of Directors (HRBoD) was formed. Its mission was to build a coalition of leaders responsible for providing the necessary integrated framework and focus to effectively coordinate integration of Navy manpower, personnel and training processes, programs, and supporting policies. Its purpose was to cut across traditional organizational lines of authority to ensure that the right decisions are made. The uniqueness of the HRBoD stemmed from its ability to gather high-level representation from all principal organizations whose decisions affect naval personnel.²⁷² Multiple internal and external criticisms suggest the HRBoD has missed its strategic focus mark.

Suggestions for producing a more holistic personnel management system include the following:

- Sparkling strategic life into the current Human Resource Board of Directors (HRBoD).
Appointing a board facilitator who can identify and focus on appropriate personnel issues, might be one way to accomplish this goal.
- Attack the ignored personnel requirements determination process. This process is essential for manning the fleet appropriately, yet it is long overdue for an overhaul. The requirements scope should not only include active duty Naval personnel, but also the reserve, civilian, and contractor forces as well.
- Begin the transition away from a high personnel conscription up-or-out model to a more stable/innovative workforce. Two necessary steps are first to allow more sailors to stay in the Navy, and then to make more sailors want to stay in the Navy. This requires improving warrior motivation, adding senior billets, and identifying a career warrior option for senior sailors to compliment the current upwardly mobile command career track.
- Elevate a human resource chief to a four-star level, ensuring the Navy's number one priority gets adequate representation and visibility.
- Align training into human resource management. As training and education in today's learning Navy is an intricate part of a sailor's career from the time he goes to boot camp to the time he attends the transition assistance program (TAP) prior to leaving the navy, the many facets of training and education should be incorporated into a holistic and efficient human resource system.

Step 5: Improve Mechanisms for Continual Strategic Human Resource Change

Sam Walton valued change, experimentation, and constant improvement. But he didn't just preach these values, he instituted concrete organizational mechanisms to stimulate change and improvement. He gave department managers the authority and freedom to run each department as if it were there own business.²⁷³

In a recent Proceedings article, George Steele observes that it is likely those most competent to shape the future of the Navy are brilliant mid-level officers, together with the best young civilian scientists and engineers. They are at the height of their mental powers and physical vigor, and are up-to-the-minute on the latest technology. These officers are most likely to be at sea or in the air, working with the weapons and systems developed by those before them and using tactics devised by their seniors. They can see the big and little improvements that could be made if they had the power to change things.²⁷⁴

As part of a general climate for continual improvement, the following initiatives might be explored:

- Establishing a TOPGUN-like think tank for strategic HR innovation. TOPGUN was formed out of necessity because of dismal air-to-air combat performance in the early days of Vietnam. Essentially an organization run by junior officers, TOPGUN takes the best in the business and provides the tools and environment to innovate the fleet's strike-fighter tactics. Instructors at the end of their tour then rotate into the fleet to continue the process of innovation.

A similar vision might be realized by taking six top performing junior officers from the fleet each year and sending them to the best MBA programs in the country (Harvard, Stanford, MIT). Upon completion, these individuals might roll into a three-year HR innovation tour at a CCD type organization. The total group of 18 of these young officers, armed with the educational tools and theory for complete analysis, might attack any issues and inefficiencies across the HR management spectrum.

- Enhanced emphasis on well conceived surveys. As table 6 illustrates, survey data contained in this paper were taken from surveys with very poor response rates. The new ARGUS survey is a powerful tool for evaluating changing sailor motivations and manpower trends, but it will be valuable only if the current poor response rate is improved to a statistically significant level. In order for leaders to make well-informed decisions concerning sailor motivation, all sailors need to be encouraged to complete surveys. To emphasize the voluntary theme of positive sailor

motivation, leaders should use tools such as allotting time at work to complete surveys as an incentive for completion.

In summary, the size and complexity of the current Navy human resource system demands an equally intricate plan for improvement. The Chief of Naval Operations has already begun the journey towards an innovative Navy of dedicated sailors. His initial efforts of increased emphasis on retention, leadership communication, sailor quality of life, and sailor quality of service will likely address many deficient aspects of sailor motivation. His focus should continue to expand, to include the entire spectrum of factors that contribute to warrior satisfaction. Ultimately, maximum warfighting readiness can be achieved in the most efficient manner.

Chapter 7: Conclusion

"As a coach in the NFL, I've been in a lot of pressure situations, and my guess is that the challenges I've faced are not all that different from the ones that executives deal with every day. I'm not saying that business is like football. I am saying that people are people, and that the keys to motivating them and getting them to perform to their full potential are pretty much the same whether they're playing on a football field or working in an office."

- Bill Parcells²⁷⁵

Bill Parcells' observation is not only applicable to the NFL and civilian business, it is also true about the United States Navy. The 21st Century Navy needs to transition from a mindset of manning the fleet with expendable sailors, to the strategic goal of harnessing the intellectual capital of sailors. To obtain maximum warfighting readiness using limited resources, the Navy must better motivate sailors to be engaged in the Navy's mission, dedicated to the organization, and inspired to achieve their fullest potential.

The key towards building an innovative and efficient 21st Century Navy is providing optimum motivation to its sailors. Of the people who initially decide to work for the Navy, 86% leave or have left at the end of their commitment. The 21st Century Navy can address this issue with a historic piecemeal approach of individually attacking recruiting, attrition, and retention policies; or leadership can take a more visionary and holistic approach toward addressing its fundamental problems. The harsh reality is that the Navy is not the kind of place where enough 21st Century Americans want to work.

Having identified the problem, the remaining task is to take the first step down the long road of progress. First, Navy leadership should craft an efficient 21st Century vision to guide the way it deploys, manages sailors, and addresses an uncertain future. Equally important, the multitude of warrior motivational factors should be strategically improved. Leadership, the organizational structure, and the human resource system need to be aligned towards the common vision. Finally, mechanisms and processes for continuous improvement are needed for the Navy to remain militarily and fiscally efficient in the global environment of change.

Waiting at the end of the journey will be a Navy where today's first term retention goal of 38% will seem ludicrous. Properly motivated, the 21st Century Navy will be an innovative organization of professional lethal warriors engaged in the Navy's mission and dedicated towards a common vision.

Notes

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- ³¹ Ibid.
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- ³⁵ Ibid., 5.
- ³⁶ Vernon, 129.
- ³⁷ Marcus Buckingham and Curt Coffman, First, Break All the Rules, (The Gallup Organization 1999). From the Soundview Executive Summaries series. The goal was to have a work environment where the following 12 questions are answered affirmatively: 1) Do I know what is expected of me at work?, 2) Do I have the equipment and material I need to do my work right?, 3) At work, do I have the opportunity to do what I do best every day?, 4) In the last seven days, have I received recognition or praise for good work?, 5) Does my supervisor or someone at work seem to care about me as a person?, 6) Is there someone at work who encourages my development?, 7) At work, do my opinions seem to count?, 8) Does the mission/purpose of my company make me feel my work is important?, 9) Are my co-workers committed to doing quality work?, 10) Do I have a best friend at work?, 11) In the last six months, have I talked to someone about my progress?, and 12) This last year, have I had opportunities at work to learn and grow?
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⁸⁹ Ibid.

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⁹³ Ibid., 1.

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⁹⁶ Ibid.

⁹⁷ Ibid., 8.

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¹⁰⁰ Lynne McFarland, Larry Senn and John Childress, 21st Century Leadership (Los Angeles: The Leadership Press, 1994), 39.

¹⁰¹ Department of the Navy, A Strategic Human Resource Management System For the 21st Century, Naval Personnel Task Force, Volume 1 (October 2000): 6.

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¹⁰³ McFarland, 329.

¹⁰⁴ Samuel Griffith, Sun Tzu, The Art of War (New York: Oxford University Press, 1963), 83.

¹⁰⁵ McFarland, 93.

¹⁰⁶ Ibid., 40.

¹⁰⁷ Department of the Navy, 7.

¹⁰⁸ Martha Koopman and Heidi Golding, Optimal Manning and Technological Change, Center for Naval Analyses Publication CRM99-59 (Alexandria, July 1999), 10. Amplifying information provided: The USS Yorktown CG48 was chosen as the first "Smart Ship." Workload reductions occur in three areas: 1) Policy and procedure: reorganize the watch bill so that only core functions are manned 24 hours a day. Other functions manned by flex team, routine maintenance functions are moved to day shift, and moved out of watch station manning. 2) Technology: navigation, machinery control, equipment condition monitoring, and information management functions were automated. 3) Maintenance methods: use of reliability-centered maintenance methods reduced the schedule preventive maintenance work-load by about 15%. Technology also contributed via networked PCs, remote sensors of the status of engineering and damage control components, and wireless hand-held radios. Also included was an iterative approach to adopting innovations that emphasized working through early failures and the increased size of the training department to support the innovations.

Smart Ships are being planned for all existing CG 47 and DDG 51 Aegis ships at the rate of four per year. The new ships of the DDG51 class will be delivered with Smart Ship improvements. All of the Aegis ships should have Smart Ship manning by roughly 2010. Concepts are also being applied to the USS Rushmore, the Smart Gator. The USS George Washington was designated as the first Smart Carrier.

¹⁰⁹ Koopman, 12. Amplifying information provided: The amphibious Transport Dock program is a planned 12-ship procurement that will replace several classes of aging amphibious ships. The lead ship, USS San Antonio, is scheduled to be delivered by the Full Service Contractor, Avondale Industries, in 2002. The baseline manning estimate established during the COEA was 450. This was reduced in the preliminary Ship manning document PSMD, with a further goal of getting to 360 for the 20% reduction. This is done by work smart, not hard Smart Ship techniques which include core/flex watch station manning, reliability-centered maintenance, advanced communications and display technologies, and data storage and management innovations.

¹¹⁰ Koopman, 13-16. Amplifying information provided: HSI is the systems engineering discipline that integrates people with hardware, software, information, the environment, and internal and external organizations. The advantage of HSI is that systems are designed from the beginning to take human capabilities and limitations into account, as well as the best human and machine allocation, and the costs of automation versus labor costs. One technique of HSI is the Top Down Functional Analysis (TFDA). Crew requirements start at zero under TFDA. The process to define requirements starts with operational requirements and uses them to define detailed functions, then assigns the functions to humans or automation. In addition, human systems engineers design human-machine interfaces that are as efficient as possible and systems that ensure required levels of shipboard human performance, workload, reliability, and safety can be sustained. The result is more integration, coordination, and more efficient use of crew across narrow functions. Sources of reduced manning are automation, minimization of maintenance and administrative functions, sensors for damage control, embedded training, user-friendly Human-Machine Interfaces, Corrosion minimizing materials and preservatives.

In general, the approach to manning the DD 21 will be to automate wherever practical without sacrificing capability, using the most advanced technology available. The result will be automation of many simple skills, with a probable increase in the average skill level of the remaining sailors. Maintenance will be reduced by several means. First, improved reliability and reduced maintenance will be engineered into all systems and components. Advanced materials, coatings, and preservatives will reduce cleaning, corrosion control, and painting requirements. Remote sensors will take the place of maintenance watch standers. Advanced sensors used for condition-based maintenance will be able to

predict imminent failures so that maintenance is done only when absolutely necessary. Some maintenance will be moved ashore through the use of redundant systems or swapping out subcomponents. Finally, new information technology will be exploited so that experts can be located ashore and consulted when needed.

Damage control is another manpower-intensive area that requires reductions to reach the 95 person crew. Methods to reduce damage control manning include dividing the ship into compartments, using remote sensors and automated damage control systems, engineering in improved survivability, lighter weight hoses, and robotics or automated strength multipliers. In the administration and support areas, the workload associated with routine tasks will also decrease by taking advantage of interactive databases, automated tellers, paperless ship technology, heat and eat meals, vending machines, automatic dishwashers and laundry, and hygienic toilets. Another important element of reduced manning is transferring work to the shore infrastructure. Two ways to achieve this transfer are by means of redundant systems, which allow delay of repairs until back in port, and by using information technology to link ship to shore (or other ships) and relying on remote experts.

¹¹¹ Ibid., 20.

¹¹² Koopman, 22. Some of the innovations include Integrated Information System which would capitalize on advances in commercial industry to support the transfer and integration of voice, video and data information between audio, video, and computer systems. Alternative energy catapults using electromagnetic or liquid propellant energy would provide increased reliability and reduced manning requirements compared to steam cats. Advanced systems for flight operations management to facilitate mission planning, aircraft control, and aircraft/pilot information upload and download.

¹¹³ Koopman, 23. The percentage manning reduction goal is comparable to the LPD 17 and considerable less than the DD21 goal because of the traditional, evolutionary approach used by CVN 78 and LPD 17.

¹¹⁴ Department of the Navy, A Strategic Human Resource Management System For the 21st Century, Naval Personnel Task Force, Volume 1 (October 2000): 1.

¹¹⁵ Ibid., v.

¹¹⁶ Donald Cymrot, Paul Mayberry and Michael Mara, Revolution in Personnel Affairs: Rethinking the Military Personnel System for the 21st Century, Center for Naval Analyses Publication CRM98-168 (Alexandria, November 1998), 4.

¹¹⁷ Ibid., 6.

¹¹⁸ Mcfarland, 228.

¹¹⁹ Ibid., 239.

¹²⁰ John Cordle, "Manning DD-21," U.S. Naval Institute Proceedings (February 2001): 61.

¹²¹ Elaine Donnelly, "The Credibility Crisis," U.S. Naval Institute Proceedings (August 2000): 43.

¹²² Jerry Hultin, "The Business Behind War Fighting," U.S. Naval Institute Proceedings (September 1999): 56.

¹²³ Ibid.

- ¹²⁴ "Highlights of the Department of the Navy FY 2001 Budget," Office of Budget, Department of the Navy (February 2000), <http://navweb.secnav.navy.mil/pubbud/01pres/highbook/01highbk.html>
- ¹²⁵ George Will, "Forrestal Lecture Series," Lecture, U.S. Naval Academy (Annapolis, MD: 24 January 2001).
- ¹²⁶ Peter Drucker, Management Challenges for the 21st Century (New York: Harper Business, 1999), 7-8. From the Soundview Executive Summaries series.
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- ¹²⁸ Ibid.
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- ¹³³ Ibid.
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- ¹³⁶ Department of the Navy, 8.
- ¹³⁷ John Morgan and James McGinty, "The Allure of Service," U.S. Naval Institute Proceedings (January 2000): 37.
- ¹³⁸ Clay Harris, "Masters, Martyrs and Spectators," U.S. Naval Institute Proceedings (April 1999): 31.
- ¹³⁹ Department of the Navy, 8.
- ¹⁴⁰ Ibid.
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- ¹⁴² Ibid.
- ¹⁴³ United States Department of Labor, Bureau of Labor Statistics, "Employment Projections," (20 March 2001), <http://stats.bls.gov.htm>
- ¹⁴⁴ Department of the Navy, 9.
- ¹⁴⁵ Carol Moore, Heidi Golding and Henry Griffis, Manpower and Personnel IWAR 2000: Aging the Force, Center for Naval Analyses Publication CAB D0003079.A2 (Alexandria, January 2001), 23.

- ¹⁴⁶ "Does America Have ADD?," U.S. News and World Report, (March 26, 2001): 19.
- ¹⁴⁷ Chief of Naval Operations, "Statement of Admiral Vern Clark, U.S. Navy, Chief of Naval Operations," U.S. Congress, House, Armed Services Committee on Status of the Navy, 27 September 2000.
- ¹⁴⁸ Griffith, 84.
- ¹⁴⁹ Anita Hattiangadi, Benefit and Incentive Pay Provision, Center for Naval Analyses Publication CAB D0002881.A2 (Alexandria, January 2001), 8.
- ¹⁵⁰ Ibid., 20.
- ¹⁵¹ Ibid., 22.
- ¹⁵² Ibid., 23.
- ¹⁵³ Ibid., 24.
- ¹⁵⁴ Ibid., 26-27.
- ¹⁵⁵ Ibid.
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- ¹⁶⁰ Ibid., 36.
- ¹⁶¹ Ibid.
- ¹⁶² Ibid., 38.
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- ¹⁶⁷ James Collins and Jerry Porras, Built to Last, Successful Habits of Visionary Companies (New York: Harper Business, 1994), 148.
- ¹⁶⁸ Ibid., 150.

- ¹⁶⁹ Ibid., 159.
- ¹⁷⁰ Ibid., 165.
- ¹⁷¹ John Luecke and Kenneth Fisher, "Sailors' Time Isn't Free," U.S. Naval Institute Proceedings (October 1999): 57.
- ¹⁷² Cymrot, 9.
- ¹⁷³ Office of the Assistant Secretary of Defense, 5.
- ¹⁷⁴ Department of the Navy, 13.
- ¹⁷⁵ Ibid.
- ¹⁷⁶ Ibid.
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- ¹⁷⁸ Statistics provided in the NPRST presentation given 12 Dec 00.
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Appendix A

Chief of Naval Operations

A Framework for Action

A FRAMEWORK FOR ACTION

Navy Vision

- We must provide, as a part of joint and combined operations, credible, combat-ready naval forces that sail anywhere, anytime as powerful representatives of American sovereignty.

Our Mission

To sustain a strong and credible Navy. Using forward deployed and surge forces, we must be prepared to support national interests including strategic deterrence while projecting U.S. Naval power globally from the sea, to influence directly and decisively events ashore through the sovereign presence of naval forces, throughout tire spectrum of operations in peacetime, crisis, and war.

Our Guiding Principles

- We must live and breathe service to country, to fellow citizens, and to each other. We offer challenge, growth, leadership and a chance to make a difference.
- We must plan, organize and modernize for tomorrow, while staying ready for today.
- We must be a Navy that holds quality of service for our Sailors and their families as a top priority in carrying out our missions.
- We must never forget, the Navy starts with the Fleet.

My Priorities

Today, my top five priorities are:

- To create a lifestyle of service that is attractive to bright, ambitious young men and women.
- To improve current readiness in order to be prepared to respond promptly to any tasking from the National Command Authority.
- To prepare for future readiness by developing near, mid and long-range capabilities-based investment strategies, leveraging new war fighting concepts and enabling technologies.
- To enhance our Quality of Service. Quality of Service is a balanced combination of Quality of Life and Quality of Work.
- To achieve Navy-wide alignment.
 - We must walk our talk with respect to our people.
 - We must ensure that our organizations, systems, and processes deliver exactly what they are designed to produce. Everything we do must have a Fleet focus.

Call to Action

To implement my priorities, the following pages outline only the first steps. Where appropriate, we will define metrics for measuring progress toward our goals.

1. PRIORITY: MANPOWER

DESIRED OUTCOME:

The goal is to attract and retain bright, ambitious young Americans. We must engage in the war for people and talent. We must create an environment that offers opportunities, encourages participation, and is conducive to personal and professional development. We must expand our efforts to improve our Sailors' and Civilians' quality of service by ensuring workload requirements are tied directly to combat readiness and professional development. We must win the battle of recruiting and retaining the young men and women who make it possible for us to sustain the greatest Navy in the world.

INITIAL ACTION:

- We must balance the requirements and resources related to people. Only by truly putting people first can we hope to win the war for talent.
 - Accordingly, we will work for pay reform to ensure the Sailors we need to keep Navy do not have to make an economic decision against their families' interests to stay Navy.
 - We will verify our manpower requirements process is valid and resource the requirement appropriately.
- We must achieve the proper balance in effort and resources between Retention and recruiting programs necessary to sustain the Steady-State force in both quantity and quality.
- We must reduce first term attrition. We will conduct a top-to-bottom review of the causes of first term attrition and act on the facts.
- We must improve retention, officer and enlisted, across the board.
 - All our commands, afloat and ashore, must take ownership for a comprehensive retention program that is routinely evaluated and adjusted as necessary to achieve desired goals.
 - Our newly established Center for Career Development will act as a clearinghouse of new ideas, foster innovative approaches to assist commands in the execution of their retention programs and help train commands to best present the benefits of "staying Navy" to our Sailors and their families.
 - We must encourage innovation and support experimentation in the detailing process to give commands and Sailors a more active and participatory role.
 - To ensure our retention efforts produce intended results, programs must be supported with analytical rigor using metrics that permit tracking the product of the plan.
- We will develop a plan to improve alignment among Recruiting, Recruit Training Center, and Navy Training Center.
- We will evaluate the potential for alternative accession programs for officer and enlisted personnel.

- We will examine the impact of a disproportionate number of Navy civilians becoming retirement eligible and make recommendations to the Secretary of the Navy to address this situation.

2. PRIORITY: CURRENT READINESS

DESIRED OUTCOME:

The goal is to assess and improve our current state of readiness. Over time we have systematically understated our requirements and under-funded those understated requirements. This has led to a “Psychology of Deficiency.”

We must determine, accurately articulate, and continuously validate our requirements. This will permit us to fund our essential requirements, thereby optimizing the operational impact of today’s Navy while creating a future Navy that capitalizes upon and can rapidly field new technology,

Through a “steady-strain” approach, we will obtain additional resources by articulating the Navy’s requirements for today and the future. At the same time, we will maximize the capabilities we already possess and strive to steadily improve our operational and combat effectiveness.

INITIAL ACTION:

- We will examine the analytical underpinnings of our readiness requirements and improve our ability to deliver the tools that make us ready.
- We will examine and, if possible, influence FY01 readiness accounts.
- We will improve funding of readiness accounts in the FY02 budget.
- We will conduct a zero-based review of the Fleet Modernization Program (FMP).
- We will develop a plan to improve quality and reduce cost of depot maintenance.
- We will align the OPNAV and Fleet staffs to improve focus on current Fleet readiness.

3. PRIORITY: FUTURE READINESS

DESIRED OUTCOME:

The goal is to prepare for future readiness by developing near, mid and long-range capabilities-based investment strategies, leveraging new war fighting concepts and enabling technologies. Fundamental to future readiness is a Navy properly sized and structured to carry out the National Security Strategy.

This requires a climate of innovation, experimentation, and rapid technology insertion resulting in near and long-term warfighting improvements. Speed and agility are core Navy attributes.

INITIAL ACTION:

- We will review existing studies and conduct Navy-wide analysis to determine the size and shape of the Navy required to execute national tasking.

- We will empower the Integrated Warfare Architecture process to ensure we focus on those investments producing the greatest improvements in war fighting capabilities.
- We will review and challenge the myriad of Operational Requirement Documents (ORDS). We will validate those we really need and eliminate those we don't. In the future, we will resist both ORD and mission creep that detracts from our reason for being – to control the seas and project power from it.
- We will only support programs that promise a significant improvement in warfighting capability.
- We will pursue increased funding for near-term modernization and recapitalization in the FY02 budget and subsequent budget submissions.

4. PRIORITY: QUALITY OF SERVICE

DESIRED OUTCOME:

The goal is to be a Navy that holds the quality of service for our Sailors and their families as a top priority in carrying out our mission. Every day we will strive to improve the quality of service for every sailor, chief, officer, and civilian. We will foster innovation and support technologies that will enable our people to do their jobs more efficiently and effectively.

INITIAL ACTION:

- We will define quality of service programmatically. That is, we will identify all the essential factors that define and influence the work environment. We will assess and prioritize those factors and then focus our investments to create an environment that enables our people to realize their full potential. In return, these investments will result in people who are fulfilled as well as a better Navy. For example, we will endeavor to:
 - Reduce spare part shortages.
 - Improve afloat work and living standards.
 - Improve our shore facilities.
 - Provide certified training and opportunity to do our job.
- We will task Strategic Studies Group XX to assess the current state of naval education and training and develop a roadmap to revolutionize education and training.

5. PRIORITY: ACHIEVE NAVY-WIDE ALIGNMENT

DESIRED OUTCOME:

The goal is to make the Pacific and Atlantic Fleets even closer than they are today and to unify the entire Navy so that our systems, processes, and organizations align with our institutional beliefs and values. We must be a Navy that is consistent and credible. One Navy – Fleet centric.

INITIAL ACTION:

- We will focus our internal and external messages and continually ensure that the outcome of our action is consistent with our words, behavior and most importantly our intent. Routinely, each command will be asked to assess the alignment of message-to-action and result-to-intent.
- We will align the Fleet and OPNAV staffs to better define our warfare and readiness requirements, allocate Navy resources, and conduct independent analyses and assessments. An important part of this process is the continuous evaluation of the “product of the plan”.
- We will implement a formal CNO decision-making process, using the CNO Executive Board (CEB) that provides a clear and unambiguous record of GNO decisions.
- We will establish a Navy Requirements Oversight Council (NROG).

Appendix B

An Alternate Navy Deployment Model

One alternative option to today's deployment posture is presented to provoke thought. The benefits of the initiative include less sailor time away from home, decreased work-ups, more attractive and frequent port visits, and well coordinated personnel transfers for increased Unit Cohesion. To motivate and harness sailor intellectual capital, the 21st Century Navy will probably need to provide today's amount of national security, but incorporate decreased time away from home and better port calls. This incomplete analysis is intended for illustrative purposes only.

A Navy deployment essentially serves two functions: to support area commanders, and to show the flag overseas. Currently the second function has suffered greatly due to theater commitments constraining forces primarily to the Persian Gulf. Naval capabilities required by CINCs include power projection ashore, anti-air defense, anti-submarine defense, anti-surface defense, and ship boarding in support of local sanctions. In the past, this required a large battle group of ships, including an aircraft carrier, for credible and immediate land attack. Now, these capabilities can reside in a notional power projection unit consisting of a single AEGIS ship and a fast attack submarine (table 7). While these two platforms lack the robust land strike capability of an aircraft carrier and the unique Marine Corps assets of an amphibious ship, they would satisfy most CINC requirements for immediate response. The big deck ships would deploy with a single power projection unit (sub and Aegis) of their own.

Type Unit	Composition
Basic	1 submarine and 1 AEGIS platform (2 Tomahawk Shooters)
Carrier Unique	1 CV, 1 submarine, and 1 AEGIS
Amphib Unique	1 Amphib, 1 submarine, and 1 AEGIS

Table 7
Notional Power Projection Units

Consistent with the scalable and adaptable FORCEnet concept of the future, power projection units would be deployed to a theater depending on the politicians' objectives. During peacetime, one power projection unit might suffice for most current 1.0 carrier presence requirements. As tensions escalate, the need to enforce no-fly zones arises, or ground troops are required, additional power

projection units or specific large deck units can be added to the netted force as needed. The current Battle Group commander would embark on the aircraft carrier to provide localized Navy leadership to a scalable effort.

The issue of deployment lengths can now be addressed in the context of an efficient provider of national security. It will be assumed that the current two-carrier/two amphibious group capability, providing six months of warfighting capability, is still desired. Replacing an entire battle group with a two-platform requirement for a specific theater, frees up the other deployed ships to engage in a long-lost motivational tradition...showing the flag by visiting attractive ports around the world.

A major impact to time away from home is the approximate four-month work-up period required prior to the six-month deployment. For the sake of this discussion, although not optimal, it will be assumed that a unit could fight after a two-week work-up period if absolutely required. The reduced theater presence model would also allow options such as ships hanging out off of CONUS for perhaps a month in the beginning of their six-month commitment (to finish work-ups started 2 weeks before the 6 month commitment). Thus, following a two week dedicated work-up, the six-month deployment commitment would immediately begin.

Another benefit to the smaller power projection units, is that ship deployments can now be evenly staggered over the course of the year instead of an entire battle group or ARG deploying at one time. Instead of an entire group of ten ships having the same turnaround training cycle, smaller groups of two and three platforms deploying at evenly spaced intervals would allow much more flexibility for the personnel system to transfer sailors at the best time in a deployment cycle. Ideally, when an individual completes training and is ready for assignment to a unit, there are always a couple who are just beginning their turnaround training.

A final advantage to a reduced theater commitment can be realized at the end of a six-month vulnerability window. While a ship is technically still committed to warfighting if needed, the last month can be spent in its homeport in a ready status to sortie if needed. Figure 26 illustrates the benefits of this proposed model.

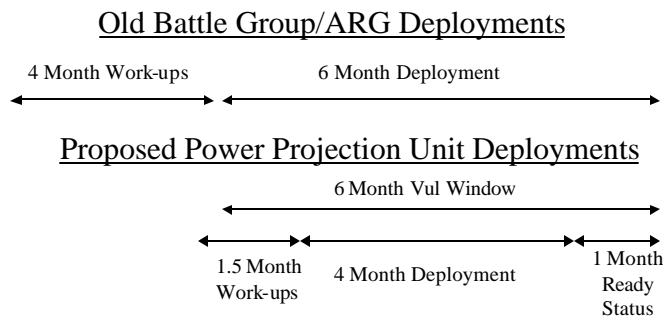


Figure 26
Alternative Deployment Schedule

Figure 27 supports this and other alternatives by portraying less than optimal, but acceptable readiness compromises for short notice deployment flexibility. The C-2 deployment bars are those that characterize accelerated or abbreviated maintenance and training, enabling a ship to deploy ahead of schedule. This pattern was typical of many platforms that responded as part of Operations DESERET SHIELD and DESERT STORM. The worse case situation for the accelerated schedule occurs when a ship is in the middle of selected restricted availability (SRA). Before such a ship would be able to deploy, it would have to be put back together, undergo some shakedown, have a required minimum of training, and load weapons and stores. Those procedures might take as long as five months. Later in the cycle, however, after the major maintenance period is over, a ship typically could be ready within a month or two.²⁷⁶

History is another valuable tool for exploring alternate deployment models. Between 1946 and 1989, there were 125 occasions worldwide on which one or more carriers were ordered to respond to crisis situations. Some of these were clearly situations in which a carrier was dispatched to the scene as a show of interest simply because the carrier was deployed nearby. Review of the 125 cases, however, suggests that almost half of the time there may have been adequate objective reasons to send one or more carriers to the scene, even if it meant sending the carriers from their homeports in the United States. Averaged over the 45-year period, about 2.5 carrier responses per year were triggered by political and military crises. This does not include the cyclic carrier deployments that went on for approximately 14 years during the Korean and Vietnam wars.²⁷⁷

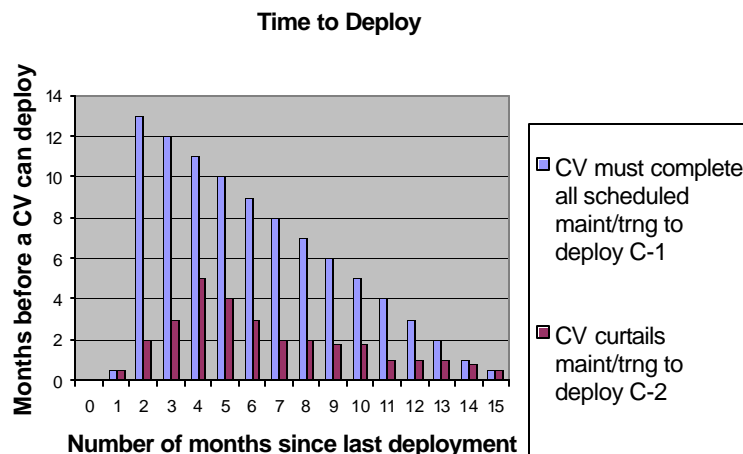


Figure 27
Time to deploy as a function of months since previous deployment²⁷⁸

A modified deployment posture would reduce the responsiveness of carrier and amphibious assets to crises and contingencies. The expected delays in response times might be as great as 10-14 days because the specific assets might have to transit from other theaters or CONUS. The impact of such delays depends on indications and warning times in contingency scenarios. Clearly, there are incidents, such as the USS Pueblo seizure or the Achille Lauro hijacker intercept, when an effective response must be immediately on scene. In those times, worst case naval options would be limited to submarine and Aegis platform launched land attacks.²⁷⁹

As for financial implications, studies show that most modified deployment postures produce some savings in operating costs, but the differences between the current deployment policy and any modified deployment alternative are relatively small. Most of the battle group annual costs are fixed ownership costs.²⁸⁰

In summary, the Navy's rigid deployment model should be modernized to provide the flexibility and scalability for the future FORCEnet concept. In the process, increased efficiencies will improve most of the top motivating factors to the 21st Century Sailor. Although alternate deployment modes would offer little direct financial savings, human resource management improvements and corresponding increases in personnel readiness warrant further exploration of new ways to provide national security.

Appendix C

Addressing Pilot Retention: An Aviation Co-op Experiment

The following discussion, although incomplete, is provided for illustrative purposes of a possible 21st Century Navy cooperative experiment. As with any successful co-op arrangement, it would benefit the individual, the civilian business, and most importantly, the Navy.

A recent salary survey revealed that an airline captain with the maximum number of years on the scale and flying the heaviest of aircraft earns \$178,000 per year, an increase of 5.4% over the 2000 yearly average of \$169,674. The largest increase was at Delta Air Lines, where the senior--most captains now make \$248,040, up from \$209,388 a year ago, an 18.5% increase.²⁸¹

Because of a shortage of experienced pilots, airlines are changing their recruiting requirements to meet, not exceed, FAA minimums. Some airlines also are providing assistance in gaining ratings prior to hire, as well as facilitating career transfers from affiliated regional airlines to the majors.²⁸²

	2nd/1st Officer (Entry Level)	1st Officer (5 years)	Captain (10 years)	Captain (Max)
Major Airlines Annual Average Pay	\$32,724	\$87,732	\$143,652	\$178,800
National & Jet Operators Annual Average Pay	\$26,256	\$43,392	\$79,912	\$89,016

Table 8
Airline Pilot Pay²⁸³

As seen in table 8, it will be difficult for the Navy to financially compete with major airline competition. Civilian airlines generally desire multi-engine jet experience from their new pilots, and a minimum of 1500-hour total flight time experience. Hence, military pilots need to stay flying to keep the airline option open. As airline seniority determines promotions, pay, lifestyle, and type aircraft, it drives military pilots to leave as soon as possible to begin their new career.

The result is that the Navy has become essentially a free airline-training unit. At approximately \$2000 worth of gas per TACAIR flight hour, 1500 hours of military flight time equates to \$3 million per pilot worth of free experience for the airlines. It may be time to apply some basic business savvy to the situation to collect on the Navy's investment. A strategic vision emerges: get in bed with the airlines to get some payback for the pilot training investment via more years of service with the Navy.

A possible aviation model centers around an arrangement with airlines where pilots fly with the airlines in lieu of shore tours and return to fly on sea duty as a payback (illustrated in figure 28). During

the airline shore duty, the Navy would continue to pay the individual's military salary in a similar fashion to the way the Navy currently pays for fellowships tours like the White House or Legislative fellowships. Assuming an average aviator salary of \$60K per year, compensating a two-year airline tour of \$120K is merely what the Navy would have paid for 60 hours of flight proficiency alone (fuel only).

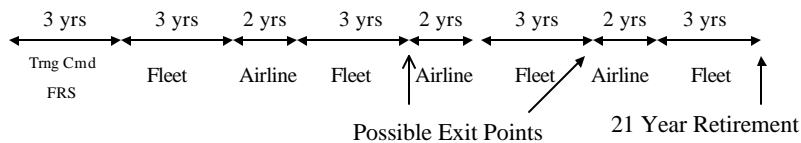


Figure 28
Alternative Pilot Career Path

This option does require an alternative to the current up-or-out officer career path. Thus, the two future career paths would be the current Naval Aviation Command Career and a new second Aviation Warrior option. The warrior force would always remain in the cockpit, thus greatly increasing current squadron experience/readiness, but might not promote beyond O-5 or receive squadron command.

In short, this aviation co-op alternative expands pilot sea duty out to a maximum of 12 years, thus increasing fleet readiness and extracting more sea service from its training dollars. In addition, the Navy wouldn't have to pay for shore duty flight time proficiency. The individual would be able to begin his airline seniority earlier, receive double pay especially during the financially draining early airline years, and prolong the military benefits of camaraderie and excitement.

Appendix D

Organizational Change for the Navy

Admiral Reason stated, "American Sailors are used to change and excel at it. The Naval Service led the way in steam, ironclads, carrier aviation, amphibious warfare, nuclear power, and sea-based missiles. To preserve our naval preeminence, we must continue to be at the forefront of innovation and adaptation."²⁸⁴ Evidence suggests that Navy leadership adapts equally as well to significant human resource challenges, as they have proved throughout the Navy's history. Most recently, the military has managed to the transition to an all-volunteer force in 1973, rectified the force quality and quantity crisis in the late 1970's and early 1980's, and reduced forces by over a third in the early 1990's.²⁸⁵

The U.S. Navy, faced with a deficient human resource model and a demanding fiscal environment, is poised for another sizable change in the way it operates. As the transformation begins, Navy leadership might benefit from corporate examples of change as well as modern organization change theory. Peter Senge and John Kotter, both academic authorities on organizational change, offer the following observations followed by applicable civilian case studies.

Peter Senge on Change²⁸⁶

An organization will need to do more than come up with a better idea to get a self-sustaining growth initiative. There are three fundamental reinforcing processes that sustain change by building upon each other: 1) Enhancing Personal Results, 2) Developing networks of committed people, and 3) Improving the organization's results.²⁸⁷

Any initiative that promises a personal benefit for the people involved is naturally going to garner their commitment and enthusiasm more easily than an initiative from which they draw no benefit. Enhancing personal results generates enthusiasm and commitment, which in turn, encourages a greater investment in the change initiative. This leads to greater learning capabilities, which, in turn, lead to even higher personal results, and so on.²⁸⁸

Informal networks of managers who are interested and committed to change are key to spreading learning and building credibility for change initiatives. There are three reasons that explain the informal network's power. First, these networks are typically already in place for day-to-day work and are natural

conduits for new information or learning. Second, information about new programs or change from people you know and work with is more credible than information for "official channels." Lastly, experimenting with new ideas requires help and support, which is more likely to come from trusted colleagues than from the hierarchy.²⁸⁹

The final reinforcing process of improving the organization's results is the most obvious. When change and learning can be shown to yield better results, it naturally acquires greater acceptance and commitment from people.²⁹⁰

John Kotter on Change²⁹¹

John Kotter believes the change process goes through a series of phases that, in total, usually require a considerable length of time. Skipping steps creates only the illusion of speed and never produces a satisfying result. Getting a transformation program started requires the aggressive cooperation of many individuals. Without motivation, people won't help and the effort goes nowhere. Management's mandate is to minimize risk and to keep the current system operating. Change, by definition, requires creating a new system, which in turn always demands leadership.²⁹²

Transformations often begin when an organization has a new head who is a good leader and who sees the need for a major change. If the renewal target is the entire company, the CEO is the key. In the most successful cases, an individual or a group facilitates a frank discussion of potentially unpleasant facts, "to make the status quo seem more dangerous than launching into the unknown."²⁹³ Many observers believe the Navy's change process has already begun when the new Chief of Naval Operations took over and began his dialogue on current Navy challenges.

Kotter contends that a successful change process contains eight steps: Sense of urgency, forming a powerful guiding coalition, creating a vision, communicating the vision, empowering others to act on the vision, planning for and creating short-term wins, consolidating improvements and producing still more change, and institutionalizing the new approach.²⁹⁴

Both Senge and Kotter package essentially the same concepts in a different wrapper. Which wrapper is chosen is not as important as choosing at least one. The following case studies provide insight on techniques that worked in specific scenarios. It will be important for the 21st Century Navy to choose a course that fits its unique circumstances.

Air Force Change

In 1978, General W. L. Creech took command of the Air Force Tactical Air Command (TAC), which was in a sorry state. At any one time, half of the planes in TAC's \$25 billion fleet were not battle ready with more than 220 planes classified as "hangar queens," grounded at least three weeks for lack of spare parts or maintenance. TAC pilots, trained at a cost of \$1 million each, lacked the flying time necessary to keep their skills sharp, and the best were deserting the Air Force in droves. So, too, were mechanics and technicians, frustrated in their jobs and disappointed by the deplorable living conditions at almost every TAC installation. Perhaps worst of all was the soaring accident rate that resulted in tragic deaths, unnecessary loss of expensive aircraft, and embarrassment for the service.²⁹⁵

At the time, he was in charge of 115,000 active duty personnel, 65,000 reserve personnel, 3,800 aircraft, and a discretionary budget of \$1.4 billion. He led his forces essentially using four guiding premises. First, workers are more professional when provided with a professional environment. Second, workers take more responsibility when they have a sense of ownership. Management control is established through motivation, not regulation. And finally, consolidation and centralization can lower output as well as costs.²⁹⁶

In six and a half years, Creech turned his command from the Air Force's worst command to its best. By the time he left TAC, 85% of his airplanes were rated as mission capable as opposed to approximately 50% when he took command. TAC was capable of launching 6,000 sorties a day; double what it had been when he arrived at Langley. In peacetime, the crash rate had dropped from one for every 13,000 flying hours to one for every 50,000.²⁹⁷

The transformation was far from easy. For much of the time, it had been a battle, and heads had rolled. The lazy and the incompetent, who had found numerous hiding places in a centralized structure, were smoked out when maintenance operations moved to the flight line and squadrons were held accountable for their performance. Some had to leave, but many more decided to stay. In 1983, two-thirds of the first-term mechanics decided to reenlist, or nearly double the rate of 1977, the year before Creech took command. Second-term retention rates went from 68% to 85% over the same period. Of the 148 wing commanders who served under Creech, only about 3% were relieved for poor performance--fewer than under any of Creech's three predecessors. Creech emphasizes, "You just don't get results by going around chopping people's heads off."²⁹⁸

Concerning the possibility of decentralization and delegation as loss of control and abdication of command, General Creech believed the opposite was true. "When I left TAC, I had more control over it than my predecessors. I'd created leaders and helpers at all those various levels. Without that kind of network below you, you're a leader in name only." Furthermore, he states, "It's not really that hard to run a large organization. You just have to think small about how to achieve your goals. There's a very finite limit to how much leadership you can exercise at the very top... Things are achieved by individuals, by collections of twos and fives and twenties, not collections of 115,000."²⁹⁹

American Express Change

When Lou Gerstner became president of the Travel Related Services (TRS) arm at American Express in 1979, the unit was facing one of its biggest challenges in AmEx's 130-year history. Hundreds of banks were offering or planning to introduce credit cards through Visa and MasterCard that would compete with the American Express Card. Within a week of his appointment, Gerstner brought together the people running the card organization and questioned the principles by which they conducted their business. In particular, he challenged two widely shared beliefs--that the division should have only one product, the green card, and that this product was limited in potential for growth and innovation. Gerstner

also moved quickly to develop a more entrepreneurial culture, to hire and train people who would thrive in it, and to clearly communicate to them the overall direction. He and other top managers rewarded intelligent risk taking. As a result of these and other innovations, TRS's net income increased a phenomenal 5007% between 1978 and 1987 - a compounded annual rate of about 18%. The business outperformed many so-called high-tech/high-growth companies.³⁰⁰

National Football League Change

Even the most talented teams can fall into a habit of poor performance. To break that habit, says one of the NFL's winningest coaches, leaders better be prepared to get in people's faces. Bill Parcells knows a lot about taking a team that's performing poorly and turning it around after doing it three times. In 1983, as his first year as a head coach, he led the New York Giants through an abysmal season, winning only three games. In the next six seasons, the Giants climbed to the top of the league, winning two Super Bowls. When he became coach of the New England Patriots in 1993, they were coming off two years in which they'd won a combined total of three games. In 1996, they were in the Super Bowl. In 1997, when he came to the New York Jets, the team had just suffered through a 1-15 season. Two years later, they made it to the conference championship.³⁰¹

He believes a key element of leadership is to be honest with people--brutally honest. You have to tell them the truth about their performance, you have to tell it to them face-to-face, and you have to tell it to them over and over again. Sometimes the truth will be painful, and sometimes saying it will lead to an uncomfortable confrontation. The only way to change people is to tell them in the clearest possible terms what they're doing wrong. And if they don't want to listen, they don't belong on the team.³⁰²

He believes if you want to get the most out of people, you have to apply pressure--that's the only thing that any of us really responds to. Creating pressure in an organization requires confrontation, and it can get very intense, very emotional. Confrontation does not mean putting someone down. When you criticize members of the team, you need to put it in a positive context..."I think you're better than you

think you are," or, "it's in your best interest if you succeed, and it's in my best interest if you succeed. We really want the same thing."⁶⁰³

When you've done a lot of losing, it gets hard to imagine yourself winning. So even as he's confronting players about their weaknesses, he is also trying to build a culture of success. That's not something you can do overnight. You have to go one step at a time. He didn't focus on the ultimate goal-getting to the Super Bowl. He established a clear set of goals that are within immediate reach. When you set small, visible goals, and people achieve them, they start to get it into their heads that they can succeed.³⁰⁴

Parcells realizes that companies today are having trouble hanging on to their best people; there's a great deal of turnover and not much loyalty. Today, you no longer have the time to develop your talent in the old way. When he started, coaches reworked maybe 8% or 10% of their teams every year. Now it's sometimes as high as 30%. This means being extremely careful about the new people that are hired. Serious damage can be done with a few bad choices. Unfortunately there's no science to picking the right people. The right one is usually the one who understands what it will take to succeed and is committed to making the effort. He's convinced that if team members share the same goals and the same passion, and if they are pushed to achieve at the highest level, the team will come out on top.³⁰⁵

Ernst & Young Change

During Ernst & Young Transformation in 1993 in the United Kingdom, the steering group found that the change initiatives were easier for some people to take than others. Younger people generally appeared more willing than those more senior to embrace the initiatives with enthusiasm. A staff member commented, "I feel sorry for the mid-career people. They were educated in one way and they are being asked to make radical changes. Most are coming around over a period of time, but it is difficult for them to watch the floodgates open. They have to relinquish power and they have to become motivators instead of controllers. Some just cannot do it."⁶⁰⁶

Another problem was growing feedback that many in the firm were becoming frustrated with "initiative overload." People were having a hard time seeing the connections among all of the initiatives. A senior manager stated, "More links should be established. Many people cannot put the jigsaw puzzle together." A supervisor echoed, "They talk about change, but no one has said where we are now and where we are going." Nick Land, the architect for change, felt that it would be an error to over-react prematurely by creating some over-arching vision or framework. This was partly because he was convinced with an organization with so many intelligent people, he would never get buy-in if a route map was introduced. A manager countered, "I don't mind going on a voyage of discovery, but I would like to know which ocean I am sailing on."⁶⁰⁷

Harley-Davidson Change³⁰⁸

Of all case studies, Harley Davidson offers perhaps the best correlation to today's Navy. In the late 1980s, Harley-Davidson beat back an assault by Japanese competitors and engineered a remarkable financial turnaround. But it subsequently faced an even more formidable challenge: maintaining and improving on its success in the absence of an external crisis. To answer this challenge, then-CEO Rich Teerlink, partnering with organizational consultant Lee Ozley, threw out the top-down strategies that had just saved the company and began building a different Harley--one that would be driven not by top management, but by employees at every level. This success story contains three messages that could be easily applied to the Navy: people are a company's only sustainable competitive advantage; there is no "quick fix" to effect lasting, beneficial organizational change; and leadership is not a person, but a process to which everyone must contribute.

Upon review, Teerlink and Ozley determined that the traditional "command and control" hierarchies were of limited effectiveness and durability. These hierarchies were borrowed from the military by the American railroad empires of the late nineteenth century, and they had since been recreated by most of corporate America. Because they are "top down" and more or less unilateral in their

decision-making, command-and-control organizations can move quickly in a crisis. When Harley was in crisis in the early 1980s, it benefited significantly from just this kind of decisive, top-down leadership style.

When the crisis disappears, leaders have to stop taking answers to their people and instead take questions to their people. Leaders have to give up on some of the most treasured prerogatives of management. Instead of demanding compliance, these managers have to earn, and call upon, commitment.

Building on his own long-held belief that people were the most important resource in any corporation, Rich began wondering aloud how Harley could provide new kinds of incentives which would stimulate a broad base of "ownership" across the company. That way, the company would be more likely to get the best effort out of its employees. In the long run, Harley could survive and prosper only if every employee took responsibility for leading the company.

Lee Ozley was a student of the organizational theorist Abraham Maslow who argued that absent a crisis, people rarely commit to a program that is imposed on them. On the other hand, they willingly commit to a program that they help create. This, Ozley suggested, had profound implications for the leaders of an organization. Perhaps a "leader" isn't someone who solves all of an organization's problems unilaterally. Perhaps a leader is someone who effectively identifies and brings together a broad range of people in a group problem-solving procedure. Thus, a new leadership definition emerged as the process of creating and sustaining an environment in which people work together toward the achievement of common goals.

The first step towards the new company environment was for leadership of the organization to sit down together and discuss the future they wanted to achieve, a "Vision of ideal future." This vision is perhaps the key ingredient missing in a successful Navy transformation. Once this common goal is identified, the roadmap and its execution tend to follow typical business models.

A challenging aspect of the transformation was upending the organizational pyramid. As part of its vision, Harley wanted teamwork without teams. The top-down approach was transformed into a circle

organization depicted in figure 29, on July 1, 1993. The twelve-page document, titled "The Organization," implied that this structure eventually would come to bear on all levels and activities of the organization. This type circle might be applicable to a future Navy's organizational structure.

Surprisingly, the issue of compensation was addressed in the form of employee motivation drawing upon the same works this paper cited, those of Maslow and Herzberg. Teerlink and Ozley identified the fundamental challenge as the need to align people's intrinsic motivation with the needs and priorities of the company. One conclusion was that salaries and benefits are only a part of a totality of rewards and recognition. This totality makes an individual want to be a productive contributor to the larger organization. They also determined that rewards and recognition must focus on the right things.

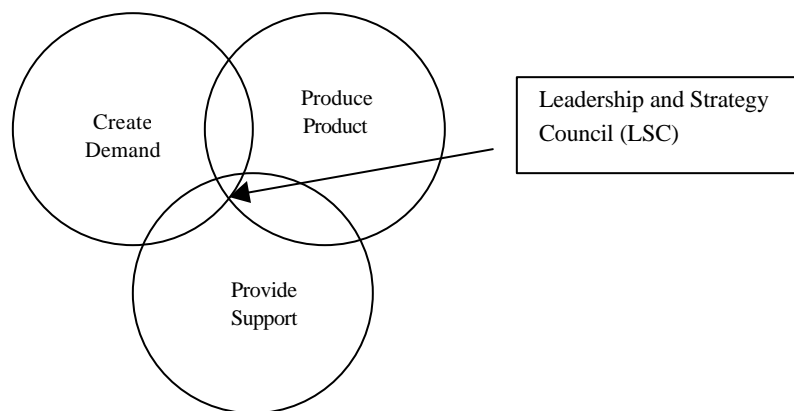


Figure 29
Harley-Davidson Circle Organization

Harley began pushing in the late 1980s for variable compensation for all of its employees. Leadership wanted to make sure that the criteria used to determine variable compensation were closely tied, on an annual basis, to the evolving goals of the company. The company's Short-Term Incentive Plan was changed from being based 100 percent on financial performance to being based on a combination of financial performance, quality, working capital, and people.

As part of Harley's newly adopted Lifelong Learning environment, the company created the "Harley-Davidson Leadership Institute" in 1991. The institute formalized and centralized all the various learning, training, and development initiatives and activities then going on across the company. By 1994, more than 2000 of the company's 5,800 employees took courses sponsored by the institute.

In summary, the transformation that Harley undertook was very similar to the one the Navy needs to begin--one completed in the absence of an outside threat.

Final Thoughts on Change

"We can always find new possibilities." As Henry Ford said, "You have got to keep going and going."⁶⁰⁹ The Navy has always been good at continual change. The historic deficiency of Navy change is the piecemeal approach towards evolution rather than a big-picture strategic progression. Another drawback is the tendency for Navy leadership to shy away from cold hard decisions that often characterize the civilian business climate. An IBM example lends insight into benefits associated with tough calls.

Throughout its history, IBM was the most dominant company in the computer industry. From 1980 to 1989, IBM made more money after taxes (\$51 billion) than any other company in the world. With a market capitalization soaring to \$62.4 billion by 1990, it was also the most valuable. But by early 1993, the bottom had fallen out of the company. In 1991, the company had \$62.4 billion in revenues, but posted \$2.86 billion in losses. 1992 was even worse. The company lost \$4.92 billion, the worst net loss in American corporate history. In 1993, Louis Gerstner, the former CEO of RJR Nabisco, replaced CEO John Akers.³¹⁰

When Gerstner took over, employees knew that more cuts were imminent. However, Gerstner took an approach to downsizing that offers a key lesson in turning a company around: If you have to downsize, do it quick, and do it once. "We need to get behind us this Chinese water torture we have been going through," Gerstner told employees. "Making reductions slice by slice, quarter by quarter as we have over the past couple of years is unfair and debilitating."⁶¹¹

There may be long term benefits to getting the pain over quickly rather than dragging out an easier to sell, short-term, decision that's less effective. Some argue that many of the Navy current manpower challenges stem from poor decisions made during the 1990s draw down, that were easier to swallow than the needed across the force cuts.